The Social Psychology of Variations in French Canadian Speech Styles

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Abstract

Taped speech samples of 20 French Canadian and 3 Continental French adult males were played for groups of French Canadian adolescent boys from three regions of Montreal, who were asked to evaluate the speakers' personalities and abilities on 19 adjectival scales, and to estimate each speakers' likely occupational level. The same rating procedure was followed with the speech samples of 21 French Canadian and 3 Continental French adult females, and then with 21 French Canadian and 3 Continental French teen-age boys. In addition to these judgments of personality inferred from speech samples, judgments of the speech patterns themselves were also made by graduate students whose native language is French.

Analysis of the judgments of speech pattern gives strong support to the hypothesis that speech is expressive of values. The evidence indicates that French Canadians model their speech on those with whom they identify, i.e., those who are upwardly mobile adopt upper-class speech features. Upper-class or educated speakers differ from lower-class speakers on many dimensions of speech, eg., pronunciation, intonation, accent, tonal quality, etc.

The speech styles of different SES levels can be accurately discerned by listeners, but mainly on the basis of a gross upper-class vs. lower-class dichotomy. These SES- and education-related speech style differences seem to be the bases on which speaker competence, the primary dimension of person perception, is judged.

The teen-age boy judges use different dimensions in judging adult men, adult women, and other teen-age boys. However, in all three

cases the primary dimension of judgment includes competence. Perceived competence is more related to the SES background of adult male speakers than it is to the background of adult women or of teen-age boys. The judgments on the secondary dimension, whether it be benevolence, sternness-leniency, or "toughness", are not highly related to SES or education for any of the three kinds of speakers, nor are they easily predictable from speech on the basis of the indices used in this study.

Although the teen-age boys use different dimensions in judging each of the three samples of speakers, the graduate-student judges use the same dimensions for all three. There are also differences among the teen-age boy judges in the ways they rate speakers; in general, those from a more prestigious, high SES-level school system are most similar to the graduate students in their rating styles.

Acknowledgements

Appreciation is extended to John Macnamara and G. Richard Tucker for helpful suggestions early in the study, and to James O. Ramsey for his help in the methodology of factor score computation. Special thanks is expressed to the participating French Canadian families for their friendliness and warm hospitality, to the principals and teachers in the participating schools for their gracious assistance, and to the French-speaking research assistants for their help. To my wife, Susan, thanks is also given for proofreading and typing and for her encouragement. Most of all, the author is indebted to Wallace E. Lambert for his ideas and encouragement which led to the study, and especially for his keen perceptiveness in the interpretation of results and his very helpful criticisms and suggestions in the preparation of the final manuscript. Much of the credit for any contribution this thesis may make goes to him. This thesis was supported by a grant from Canada Council and one from the Defense Research Board.

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Chapter I

Introduction

This thesis is concerned with "speech style"; that is, those aspects of language and communication that are preserved in a good tape recording of an excerpt of speech but not in a typed transcript of the recording. Linguists refer to these features of speech as the suprasegmental components (as opposed to the segmentals, the actual content of the message), and social psychologists sometimes refer to them as the vocal components of communication (as opposed to the verbal and visual components).

Two topics are of central interest: first, the relationship of speech styles to the motivational and personality characteristics of people from various levels of education and social class; and second, the effects of speech styles on the evaluative reactions of listeners.

The first topic centers around this question: What differences, if any, are there in the speech styles of French Canadians at various social class and educational levels? This question has been examined somewhat by linguists, Gendron (1960, 1966) and Charbonneau (1955) for example, but from a strictly linguistic point of view. Gendron (1966) compared the speech of educated French Canadians, lower-class French Canadians, and Continental French and found that his samples of educated French Canadians were similar to Continental French speakers in the relative duration of their vowels and consonants, but more like the lower-class French Canadians in intonation. Although their pronunciation of the letter (a) in words such as pas was patterned after a continental model, Gendron believes that they rarely do succeed in accurately reproducing it. He concludes that the influence of continental speech is increasing among educated French

Canadians because of more contact with speakers from France, and although the speech of educated French Canadians keeps some of its Canadian origins, it has characteristics that make it easily distinguishable from that of lower-class French Canadians. Charbonneau (1955) pointed out that a major difference between educated and lower-class Canadian speech is the diphthongization of the open (è) in words such as sévère, which is common in popular Canadian French but missing in educated speech.

Although these studies provide valuable information about differences between the speech of upper- and lower-class French Canadians, they are not meant to deal with other important questions. For example: Are the speech patterns of French Canadians stratified into discrete groupings or do they vary gradually along a continuum ranging from a distinctively low socio-economic (SES) style to a distinctively high SES style of speech? If French Canadian speech patterns are grouped into distinct strata, how many levels of groupings exist in French Canada and how do they correspond to other criteria of SES? Labov in his socio-linguistic analysis of stratification (1966) described the social class variation of five phonemes in New York City speech. He found that some phonemes, like (r), have a continuous distribution from the highest SES speech to the lowest, while others, (th) and (dh), fit into discrete groupings. Perhaps similar patterns can be expected in French Canadian speech.

Labov's study (1963) of a small New England island community, Martha's Vineyard, suggests another important possibility in connection with SES-related speech styles. He found that people adopt the speech character-

istics of the group with which they identify, their reference group. Thus those who were oriented toward staying permanently on the island adopted the local styles of speech, while those who planned to move to the mainland adopted New England styles. In a later study of social mobility (1967), Labov found that upwardly mobile persons usually take on the linguistic style of the group just above their own in SES standing, and he concluded that "linguistic stratification is the direct reflection of underlying sets of social values rather than the habits which result from close contact." This finding suggests that speech style may be a very useful and instructive projective technique. That is, just as McClelland (1958) uses TAT protocols as an index of the need-achievement motive, perhaps speech styles can be used as a dependable indicator or reflector of many kinds of motives, aspirations, and other personality features.

The first focus of this thesis, then, will be upon the nature of speech differences in French Canada, with the purpose of establishing (a) what some of the SES-related speech differences are, (b) how they distribute themselves throughout the range of SES levels, and an effort will also be made to infer (c) how they relate to motives, values and other personality characteristics of the speakers. Most linguists who have worked with social dialects have been concerned only with the first two matters while the third, more of a social psychological interest, has received little attention. However, as suggested by Labov's findings, the search for the "value expressive" characteristics of speech may well be the key to understanding linguistic stratification and the reasons for

it. In view of the current social equality movements among minority groups of all sorts, this parallel interest in social-class dialects and the reasons for their development is likely to become a major area of research in the behavioral sciences.

The second focus of this thesis, the study of the ways in which peoples' evaluations of one anothers' personality characteristics are determined by speech style, also has major implications for the philosophy of the "social equality" and "equal opportunity" movements. A good deal of the contemporary "language rehabilitation" efforts are based on the premise that "non-standard language usage" makes a person seem less intelligent or less socially desirable, but as yet very little research has been carried out to examine the kinds of reactions people have to non-standard usage. (One pilot study of interest is that of Tucker and Lambert, 1968.) Even Labov, who has contributed so much to the study of social dialects, seems to have left for the psychologist this task of examining interpersonal consequences of various speech forms. Labov has studied listeners' reactions to and evaluations of the speech styles per se, but not the evaluations listeners make of the speakers' personalities on the basis of speech styles.

Social psychologists have studied the ways in which people perceive and evaluate one anothers' personalities, but they have typically avoided using actual people as stimuli, probably because of the difficulties of quantifying the appearance and behavior of stimulus persons. It is easy enough to quantify the impressions of judges by using adjective rating

scales, but there are so many aspects to the appearance and observable behavior of the stimulus person that it becomes difficult to specify the cues by which the judge makes his judgments. Many investigators have circumvented the problem by reading a list of adjectives to judges, pretending that the traits apply to some real person, and then asking for a unified description of the person brought to mind by the traits. This procedure might provide useful information about which traits go together to form each judge's "lay personality theory" (Bruner, Shapiro, and Tagiuri, 1958), but it runs the risk of being merely a word definition game. Others have avoided the problem by ignoring how impressions are formed while focusing, instead, upon accuracy of perception. That is, judges are asked to predict the responses of the stimulus person by estimating how he would rate himself. Such studies have been hampered by statistical and logical difficulties (Cronbach, 1955). There have also been numerous studies of the impact of facial features (see Woodworth and Schlosberg, 1954, for a review), but these have either used grossly oversimplified and artificial drawings of features, or, when actual photographs have been used, it has been very difficult to pinpoint just which cues in the stimulus are responsible for the judgments made.

The stylistic (vocal, suprasegmental) aspects of speech, on the other hand, have the advantage of being quantifiable on the basis of relatively few dimensions while also being samples of actual human behavior. Some research has been done on personaltiy evaluations evoked by speech. Lambert, Hodgson, Gardner and Fillenbaum (1960), for example, have studied how listeners evaluate a bilingual speaker's personality when he speaks French at

one time and English at another (the listeners are not informed that it is the same person speaking in each of his linguistic guises). They have found that the bilingual's English guise is generally rated more favorably by both English and French Canadian judges. This technique has been a very useful one for evoking the stereotypes and prejudices of listeners, not only toward those who speak different languages, but also those who use a particular language with detectable accents, such as Jewish accented English (Anisfeld, Bogo, and Lambert, 1962). Tucker and Lambert (1968) have also studied the variations in the reactions of white and Negro American college students to a number of white and Negro regional dialects.

In all of these studies the various speech modes were clearly distinguishable from one another, whether language or dialect differences were involved. It is not yet known to what extent social class dialect differences are distinguishable to the layman. Putnam and O'Hearn (1955), Harms (1961), and Ellis (1967) have substantiated one another in obtaining correlations of approximately .80 between the actual social class levels of American men and the social class levels attributed to them by lay judges on the basis of hearing a tape recording of their speech. These studies indicate that social class differences can be recognized by laymen, but one wonders how large the differences must be in order to be detectable, and whether these findings will hold in other social settings.

The second focus of this thesis, then, will be upon the role that speech styles play in the personality impressions formed by French Canadians, with the purpose of discovering (a) the extent to which French Canadian social-class speech styles can be discriminated by French Canadian lis-

teners, and (b) the attitudes, personality evaluations, and stereotypes that French Canadians of various social-class levels hold toward those at their own and at other levels.

Chapter II

Method

Taped speech samples of 20 French Canadian and three Continental French adult males were played while 10th and 11th grade boys from three Montreal schools estimated their occupational levels and evaluated their personalities and abilities on 19 adjectives. The same rating procedure was followed with the speech samples of 21 French Canadian and three Continental French adult females, and then with 21 French Canadian and three Continental French teen-age boys. In addition to these judgments of personality from the speech samples, judgments of the speech patterns were made by graduate students whose native language is French.

Speaker families. For purposes of experimental control and for convenience in gathering appropriate speakers, an adult male speaker, adult female speaker, and a teen-age boy speaker were taken from the same family. Twenty-four families were used, 21 French Canadian, and three recently immigrated from France. The French Canadian families were chosen on the basis of the father's occupational level, to be representative of the range of socio-economic status (SES) levels in Montreal. Blishen's (1964) scale for deriving SES from occupation was used.[1]

Families were grouped into one of three major occupational SES categories. Category B includes Blishen classes 1 and 2, category C includes Blishen classes 3, 4, and 5, and category D includes Blishen classes 6 and 7. Half of the speakers from each of the three SES cate-

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[1]This scale is a ranking of occupations according to the average amount of income and education found to be characteristic of each in a sampling of Canadians.

gories were taken from the St. Laurent area (a residential suburb of Montreal), and the other half from an old section of East Montreal. (Refer to Table 1.) The category B speaker families might well be considered as nouveaux riches and not really representative of the highest level of French Canadian society. Consequently, three more families, who would be generally accepted as representatives of the aristocracy of Montreal's French Canadian society were recorded. These families live in Outremont (one of the older residential areas of Montreal), and will be referred to as category A speakers.

The validity of the aristocratic family nominations is supported by an examination of family background. Table 1 shows that the fathers of the mother and the father in the category A families hada Blishen SES level of 3 or greater. This one criterion is sufficient to include all aristocratic category A speakers and exclude all but one (B6) of the category B families. Also, in every case the sons in the category A families attend a prestigious private school (taught by teachers from France) and the sons in the category B families attend public schools.

The major part of this study is concerned with speech differences that exist between speakers of differing occupational SES levels, and the reactions that listeners have to those differences. The twenty-one families listed in Table 1 are used for these analyses. The three families from France were included as a supplement to the main study in order to compare French Canadian listeners evaluations of their own group with their evaluations of speakers from France. Since the fathers in the families from France have occupations of Blishen level 1 and 2, as do

Table 1. Background Data for Speaker Families

	Speaker Families																	
	Area 1 (Outremont)			Area 2 (Saint Laurent)									Area 3 (East Montreal)					
	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3	B4	B5	B6	C4	C5	C6	D4	D5	D6[a]
Blishen score of father's occupation	1	1	2	2	2	1	4	4	3	7	6	7	2	2	2	5	5	5	6	6	6
Father's years of education	19	23	15	11	12	22	11	9	12	13	13	-[b]	12	16	18	9	9	7	3	7	7
Mother's years of education	12	13	11	10	11	14	10	9	9	11	9	-[b]	7	10	14	6	9	5	9	5	7
Father's father's occupational Blishen score	1	3	1	4	5	5	5	4	4	5	2	-[b]	6	4	2	4	5	5	5	6	6
Mother's father's occupational Blishen score	1	2	2	6	3	1	6	6	-[c]	4	6	-[b]	5	1	3	6	7	7	5	7	6

[a]These notations will be used throughout the paper to refer to speaker families. A1, A2, and A3 will be used to represent those speakers from category A; B1, B2, B3, B4, B5, and B6 for those from category B, etc.

[b]The father in one of the category D families from St. Laurent refused to be recorded. Also, other data concerning the family was missing and the family was excluded from most of the final analyses.

[c]This man didn't work most of his life because of illness.

the category A and category B families, the received ratings of the families from France (F1, F2, and F3) will be compared only to the ratings received by speakers from categories A and B.

Each member of the 24 families was recorded as he (or she) read the two page excerpt from Le Petit Prince that is shown in Appendix A. Each speaker was asked to read the passage to himself until he felt he was ready to be recorded. Three recordings were made of each subject's readings. Four representative sentences from the second or third (whichever was better) reading were transcribed on to master tapes. (The four sentences underlined in Appendix A were the four used for all speakers.) Three master tapes were made: one for fathers, one for mothers and one for sons.

On each of the three master tapes, the speakers were ordered according to their family type to control for practice and fatigue effects. Eight family types can be identified: SES category B, C, and D from Area 2 (St. Laurent), the same three categories from Area 3 (East Montreal), the aristocrats, and the French families. The 24 families recorded provide three fathers of each of these eight types, three mothers of each type, and three sons of each type. On each of the master tapes, the speakers were ordered with one of each of the 8 types in each third of the tape. (Table 2).

Personality and SES rating sheets. Figure 1 is an example of the rating sheet used for fathers' voices. Nineteen adjectives were paired with their opposites, with 7-point rating scales between pairs. Thirteen of the 19 adjective pairs were taken from another study of personality

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Figure 1. Rating Sheet for Fathers' Voices

intelligent____:____:____:____:____:____:____peu intelligent

actif____:____:____:____:____:____:____passif

injuste____:____:____:____:____:____:____juste

sincère____:____:____:____:____:____:____faux

beau____:____:____:____:____:____:____laid

pas comique____:____:____:____:____:____:____comique

peureux____:____:____:____:____:____:____courageux

pas sûr de soi____:____:____:____:____:____:____sûr de soi

aimable____:____:____:____:____:____:____détestable

fiable____:____:____:____:____:____:____pas fiable

pas sociable____:____:____:____:____:____:____sociable

court____:____:____:____:____:____:____grand

ambitieux____:____:____:____:____:____:____sans ambition

sévère____:____:____:____:____:____:____tolérant

gentil____:____:____:____:____:____:____pas gentil

pas religieux____:____:____:____:____:____:____religieux

fort____:____:____:____:____:____:____faible

impoli____:____:____:____:____:____:____poli

content____:____:____:____:____:____:____triste

Que pourrait-être la profession de cette personne?

rapporte beaucoup d'argent, demande beaucoup de scolarité & d'entrainement ____:____:____:____:____:____:____ rapporte peu, demande peu, exige peu de scolarité

Pays d'origine de cette personne: le Canada ou la France

Table 2

Speaker Order for Each Master Tape

	First Third of Tape								Second Third of Tape								Final Third of Tape							
Speaker Order	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Fathers Master Tape	C1	A1	C4	D4	B4	D1	F1	B1	B5	F1	C5	C2	D5	D2	A3	B2	D6	C6	A2	C3	B6	B3	A3	
Mothers Master Tape	C1	A1	C4	D4	B4	D1	F1	B1	B5	F1	C5	C2	D5	D2	A3	B2	D6	D3	C6	A2	C3	B6	B3	A3
Sons Master Tape	C1	A1	C4	D4	B4	D1	F1	B1	B5	F1	C5	C2	D5	D2	A3	B2	D6	D3	C6	A2	C3	B6	B3	A3

evaluations of French Canadians made from their speech (Preston, 1963) in order to permit comparison with that study. Ten of the thirteen were grouped by Preston into three categories: (a) competence which includes the paired adjective-opposites for intelligence, ambition, self-confidence and courage; (b) personal integrity which includes dependability, sincerity and kindness; (c) social attractiveness which includes sociability, likeability, and sense of humor. The other three were religiousness, good looks, and height.

Of the remaining six adjective pairs, three are taken from the factors that Osgood (1957) found to be relevant for the perception of people. The happy-sad pair corresponds to his evaluative factor, active-passive to his activity factor, and strong-weak to his potency factor. The remaining three adjective pairs, polite-impolite, just-unjust and severe-tolerant, were chosen to reflect how the perceived person treats others.

The question at the bottom of the page, "Que pourrait-être la

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Mothers Master Tape	C1	A1	C4	D4	B4	D1	F1	B1	B5	F1	C5	C2	D5	D2	A3	B2	D6	D3	C6	A2	C3	B6	B3	A3
Sons Master Tape	C1	A1	C4	D4	B4	D1	F1	B1	B5	F1	C5	C2	D5	D2	A3	B2	D6	D3	C6	A2	C3	B6	B3	A3

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The question at the bottom of the page, "Que pourrait-être la

profession de cette person?" (What is the occupation of this person?) was used to determine how accurately student raters can estimate a person's occupational level from his speech. Comparison was made to actual Blishen scores for each speaker's occupation. The final question on the page was used to test how accurately judges can determine whether a speaker is from France or Canada.

The rating sheets for sons' voices were the same as those for fathers', except that the occupational question asked "What is the future occupation of this boy?" The rating sheets for mothers' voices used the feminine forms of the same 19 adjective pairs, and the occupational question asked "What is the profession of the spouse of this person?"

Raters of personality and SES. Classes of 10th and 11th grade French Canadian boys in three Montreal schools were used as raters for occupational level and ethnic origin, and for the 19 adjective ratings of the speakers. The schools used were located in the same three areas of Montreal from which speaker families were taken. Table 3 gives information about each school. In each school, three classes of about thirty students were used. One class from each school listened to the fathers' voices tape, one to the mothers' tape, and one to the sons' tape.

Linguistic judges and linguistic rating forms. Four judges were used to evaluate the speech patterns of each of the 71 speakers (from 24 families) on fifteen linguistic dimensions. Two of the linguistic judges were male graduate students from the McGill University French Department, one from Quebec and one from Algeria. The other two judges were females, one a French Canadian graduate student in psychology, and

Table 3. Characteristics of the Schools From Which Groups of Judges Were Taken

	Blishen Scores of the occupations of the fathers of 10th and 11th graders sampled		School location	Other characteristics
	Mean	Number sampled		
School 1	2.10	91	Outremont (Area 1)	Private school with a strong Continental French orientation. (Teachers are from France.)
School 2	2.80	83	Saint Laurent (Area 2)	Catholic School Board public school with French Canadian orientation.
School 3	5.25	72	East Montreal (Area 3)	Catholic School Board public school with French Canadian orientation.

the other a student actress from France.

Before making the linguistic judgements, these judges rated all of the speakers on the personality and SES rating sheets. This was done to familiarize them with the speech samples and also to provide a comparison with the ratings of the 10th and 11th grade boys.

The fifteen linguistic dimensions were chosen by an expert in the French language to be important in differentiating speakers of high and low SES level. Of the fifteen, eleven were subjective ratings of speech characteristics, in which pairs of opposite adjectives with seven-point rating scales were used. Figure 2 shows the linguistic rating sheet with

Figure 2. Linguistic Rating Sheet

Prononciation:

articulée / marquée _____:_____:_____:_____:_____:_____:_____ molle

juste _____:_____:_____:_____:_____:_____:_____ inexacte

Accent:

Français-Canadien _____:_____:_____:_____:_____:_____:_____ Français-Continental

Vitesse du monologue:

rapide _____:_____:_____:_____:_____:_____:_____ lente

Intonation:

beaucoup _____:_____:_____:_____:_____:_____:_____ peu

juste _____:_____:_____:_____:_____:_____:_____ inexacte

Particularités de la voix (comparée à celle d'autres personnes du même age et du même sexe):

aiguë _____:_____:_____:_____:_____:_____:_____ basse

rauque _____:_____:_____:_____:_____:_____:_____ douce

très haletante _____:_____:_____:_____:_____:_____:_____ peu haletante

Particularités de l'individu:

hésitant et nerveux _____:_____:_____:_____:_____:_____:_____ assuré et détendu

trébuche sur les mots _____:_____:_____:_____:_____:_____:_____ mots coulent sans accrocs

the eleven adjective pairs. Each of the four linguistic judges listened to all 71 speakers and rated their speech on these dimensions.

The remaining four linguistic dimensions were quantitative. Three of them consisted of each judge making a tally of "Canadianisms," mispronunciations and hesitations for each speaker. The fourth was the total time each speaker took to read all four sentences.

Chapter III

Father Speakers: Results and Discussion

Recognition of Occupational Level from Speech

Listeners can discriminate the occupational level of adult male speakers, but only with a limited degree of precision. That is, they can accurately differentiate only two broad groupings of speakers: those of Blishen classes 1 and 2 and those of class 3 or lower. (Blishen's class 1 is the highest occupational SES level, and his class 7 is the lowest.) Table 4, row 1 displays the average (arithmetic mean) occupational level ratings attributed to each group of speakers: category A (aristocrats, Blishen levels 1 and 2), category B (other Blishen level 1 and 2 speakers), category C (levels 3, 4, and 5), and category D (levels 6 and 7). It also gives the averages for the combined categories A + B and C + D. When the average of the combined categories A + B is compared with the C + D average, the difference is significant beyond the .005 level of confidence,[2] and this dichotomy alone accounts for 67% of the variance in the raters' judgments of occupational level. (This means that rater judgments could be predicted quite accurately simply from knowing whether the speaker was from the A + B category or from the C + D category.)

On the other hand, the difference between the average rating for aristocratic category A speakers and the average for category B speakers

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[2] An explanation of the meaning of "significant beyond the .005 level of confidence" is given in number 2 of the explanatory notes for Table 4, page 19. Note number 5 gives further explanation of the meaning of % of variance accounted for.

Table 4. Personality Ratings of Father Speakers Analyzed According to the Speakers' SES Levels

	Groupings According to Speakers' Occupational SES Levels												
	AB vs. CD Comparison				A vs. B Comparison				C vs. D Comparison				Total
	A+B	C+D	%v	X2	A	B	%v	X2	C	D	%v	X2	%v
1. Judged Occupational SES	3.8	*** 5.0	.67	***	3.8	3.9	.00		5.1	4.9	.00		.67
2. Intelligent	3.3	*** 4.8	.57	***	3.2	3.4	.00		4.9	4.8	.00		.57
3. Actif	3.3	*** 4.3	.44	***	3.0	** 3.4	.03		4.4	4.2	.00		.47
4. Juste	3.5	*** 3.8	.36		3.4	3.5	.00		3.9	3.8	.00		.36
5. Sincère	3.0	*** 3.6	.42	***	2.8	* 3.1	.03		3.7	3.5	.02		.47
6. Beau	3.8	*** 4.8	.56	***	3.8	3.8	.00		4.9	4.7	.00		.56
7. Comique	4.6	** 4.3r	.07		4.6	4.5	.00		4.2	4.4	.01		.08
8. Courageux	3.9	*** 4.5	.36	**	3.8	3.9	.00		4.5	4.6	.00		.36
9. Sûr de soi	3.7	*** 5.1	.55	***	3.6	3.8	.00		5.3	*** 4.9r	.03		.58
10. Aimable	3.1	** 3.3	.28		3.0	3.2	.03		3.4	3.3	.04		.35
11. Fiable	3.3	*** 3.8	.47	**	3.3	3.2	.00		3.9	* 3.7r	.04		.51
12. Sociable	3.5	*** 3.8	.22		3.6	3.5	.00		3.8	3.8	.00		.22
13. Grand	4.0	*** 4.6	.50	**	3.9	4.0	.00		4.5	4.6	.00		.50
14. Ambitieux	3.4	*** 4.4	.54	***	3.2	3.5	.01		4.5	4.3	.00		.55
15. Tolérant	4.6	*** 4.1r	.39	**	4.6	4.5	.00		4.2	4.0	.02		.41
16. Gentil	3.4	3.4	.00		3.4	3.4	.00		3.4	3.4	.00		.00
17. Religieux	4.0	3.9r	.00		4.1	* 3.9r	.12		4.0	3.8	.06		.18
18. Fort	3.6	** 3.8	.10		3.6	3.6	.00		3.6	*** 4.0	.13		.23
19. Poli	3.6	*** 4.1	.45	**	3.8	3.6	.01		4.1	4.0	.00		.46
20. Content	3.4	** 3.7	.06		3.4	3.5	.00		3.7	3.6	.00		.06

Explanation of Table 4:

1. The column labelled with the letter designation of a category (e.g., A or A + B) contains the mean of the ratings received by all speakers in that category for each attribute listed.

2. The stars between the pair of means in each comparison express the amount of confidence one can have that the obtained difference between averages is not a chance occurrence:

*** Indicates that the obtained difference between means exceeds the .005 level of confidence. (Such a difference would occur by chance less than five times in a thousand.)

** The obtained difference exceeds the .01 level of confidence. (It would occur less than one time in a hundred by chance.)
* The obtained difference exceeds the .05 level of confidence. (It would occur less than five times in a hundred by chance.)

3. The average differences for each of the three comparisons were tested using the planned comparisons method described in Hays (1963, pp. 459-483). The analysis of variance model used is one outlined in Winer (1962, pp. 124-132) for use in the persons by judges design.

4. The table is to be read such that the lower the mean, the more the trait listed was attributed to that group. (In computing the ratings, a number from one to seven was assigned to each blank on the rating scale. The positive end of the scale was arbitrarily given the value one, and the negative end was given the value seven.)

5. Whenever the usual pattern of more favorable ratings going to the higher SES level is reversed, and the difference exceeds the chance level, an "r" is placed after the second mean in the comparison.

6. The proportion values given in the columns labelled %v are an estimate of the proportion of the total variance in received ratings that is accounted for by knowing which of the two SES categories in that comparison a speaker belongs to. An entry of 1.00 in this column would indicate perfect prediction of received ratings. Another way of considering this statistic is that it is an indication of the amount of association that exists between SES category and the received ratings, similar to a correlation coefficient. Actually, it is comparable to the square of the correlation coefficient rather than the coefficient itself. (For further elaboration consult Hays, pp. 324-329.)

7. The column labelled total %v is the total of the other three %v columns and indicates the total amount of variance accounted for by using all four SES categories.

8. The entries in the columns labelled X2 give the confidence levels (from an exact test) for the contingency tables of each comparison on each attribute listed. (An explanation of the derivation and meaning of the contingency tables is given on page 23. Some of the contingency tables for which confidence levels are given in this table are shown in Figures 3 and 6.) Three stars represent the .005 level of confidence, two represent the .01 level, and one represents the .05 level.

does not exceed the chance level, and the split accounts for virtually none of the variance. The same is true of the comparison of the average for category C speakers with the average for category D speakers.

The power of the A + B vs. C + D classification and the relative non-importance of the other SES classifications in accounting for received ratings of occupation is also demonstrated in the ordering of each speaker according to his average received rating of occupation:

B4 B2 A2 A3 B3 B6 D1 A1 B5 B1 | C3 D2 C4 C2 C6 D6 C1 D5 C5 D4

10 speakers rated highest | 10 speakers rated lowest

The only speaker out of place in this ordering according to the AB - CD classification is speaker D1, and this exception to the AB - CD split is quite a logical one when his background is considered. From Table 1 (Chapter II) it is evident that both D1 and D2 are very highly educated for men of their occupational level, in fact, more educated than any of the other Ds, any of the Cs, and even more educated than half of the Bs!

The relationship between the received-rating order of speakers and the SES categories to which they belong can also be shown in tabular form. Figure 3 contains the contingency tables for the three comparisons, A + B vs. C + D, A vs. B, and C vs. D. The table obtained for the AB - CD split would be expected to occur less than five times in a thousand from chance occurences. The dichotomous SES split is obviously very useful, even in predicting which category of received ratings each speaker will fall into (upper half or lower half). The contingency tables for the

Figure 3. Contingency Tables of the Relationships Between the SES Categories and Received Occupational Ratings

Category of Average Received Ratings

SES Category	Highest 9	Lowest 11
A+B (N=9)	8	1
C+D (N=11)	1	10

AB vs. CD Contingency Table

(exact test, probability $< .005$)

Category of Average Received Ratings

SES Category	Highest 3	Lowest 6
A (N=3)	1	2
B (N=6)	2	4

A vs. B Contingency Table

(exact test, not significant)

Category of Average Received Ratings

SES Category	Highest 6	Lowest 5
C (N=6)	4	2
D (N=5)	2	3

C vs. D Contingency Table

(exact test, not significant)

An explanation of these tables is given on the following page.

Explanation of Figure 3:

1. Tables of the kind shown in Figure 3 illustrate graphically the extent to which one classification scheme is contingent upon or related to another, hence they are called contingency tables. In Figure 3 they are used to illustrate to what extent occupational ratings received are contingent upon various SES categories. They give information that goes beyond the test of whether the received ratings of one group are significantly different from those of another: they test how well SES can predict which speakers will be in the upper half on received ratings and which speakers will be in the lower half.

If a perfect relationship existed between actual SES groupings and received ratings groupings, the top right and the bottom left quadrants would have entries of zero. Balanced quadrants indicate that the relationship is negligible.

2. The probability of the obtained contingency table being due to chance is ascertained by means of Fisher's exact test (see Siegal, 1956, pp. 256-270 and pp. 95-105.) The exact test probabilities for the contingency tables of Figure 3 as well as those for all of the adjective ratings are given in the columns labelled X2 in Table 4, as well as below each contingency table.

other two SES comparisons would occur by chance more than five times in a hundred and they are therefore not considered to be significant. The A vs. B and C vs. D comparisons are thus of little importance in accounting for the ordering of average received occupational ratings.

The clarity of the AB - CD cleavage is further demonstrated in an examination of the magnitude of the differences in average received ratings between each speaker and every other speaker. These differences were computed and tested for their chance probability of occurence (Newman-Keuls method, Winer, pp. 80-85). The probabilities for each of the obtained differences are given in the matrix of Figure 4. Two stars indicate that the probability is less than .01, and one star indicates that it is less than .05. Pattern A of Figure 5 shows the kind of matrix of probabilities that would be obtained if the distribution of received ratings were continuous, that is, with the differences between each of the adjacent speakers being approximately equal. Pattern B of Figure 5 shows the matrix that would be obtained with a perfect cleavage in the distribution. None of the first ten speakers would be significantly different from one another, nor would any of the last ten, but all differences between these two groups would be significant.

Although the obtained matrix of Figure 4 does not fit exactly either of the patterns (A or B) of Figure 5, it is obviously quite close to pattern B. There are no significant differences between the average received ratings of speakers within the AB group (with D1 added). The significant differences begin at the split between the AB group and the CD group. However, there are significant differences between speakers

Figure 4. Matrix of Chance Probabilities of Differences Between Each Father Speaker and Every Other Father Speaker on Average Received Occupational Ratings

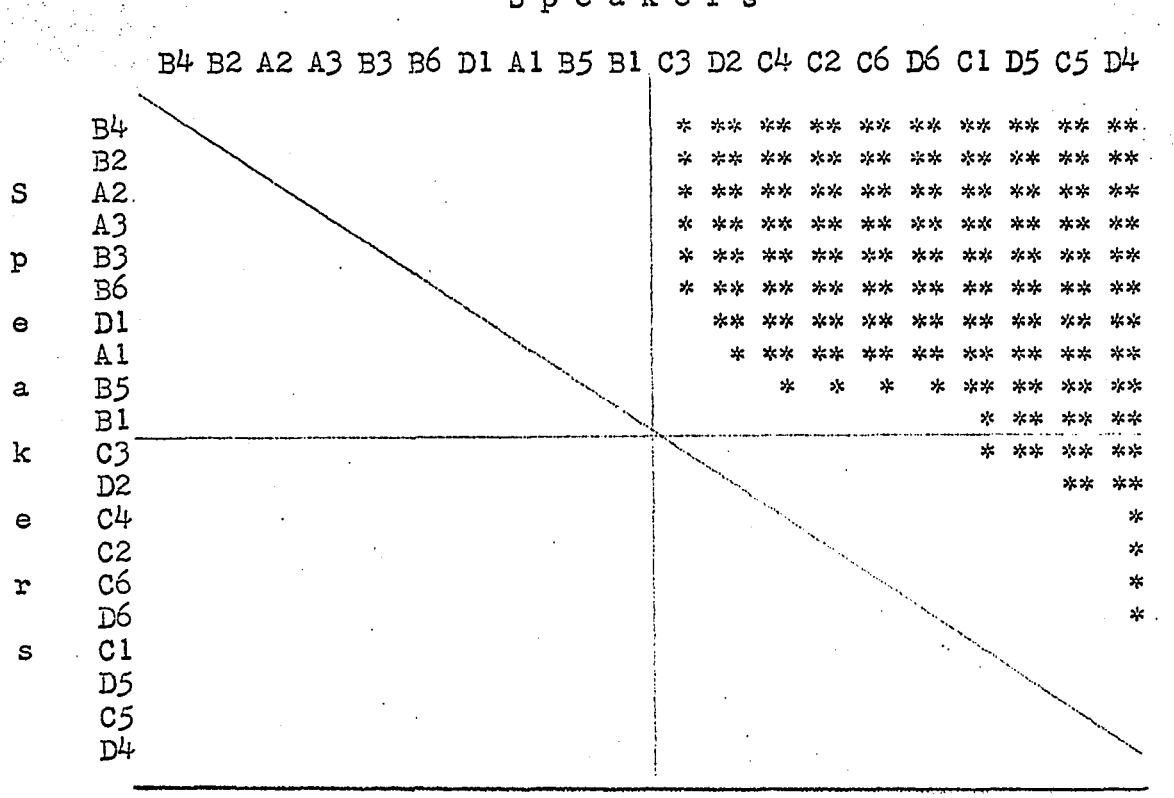
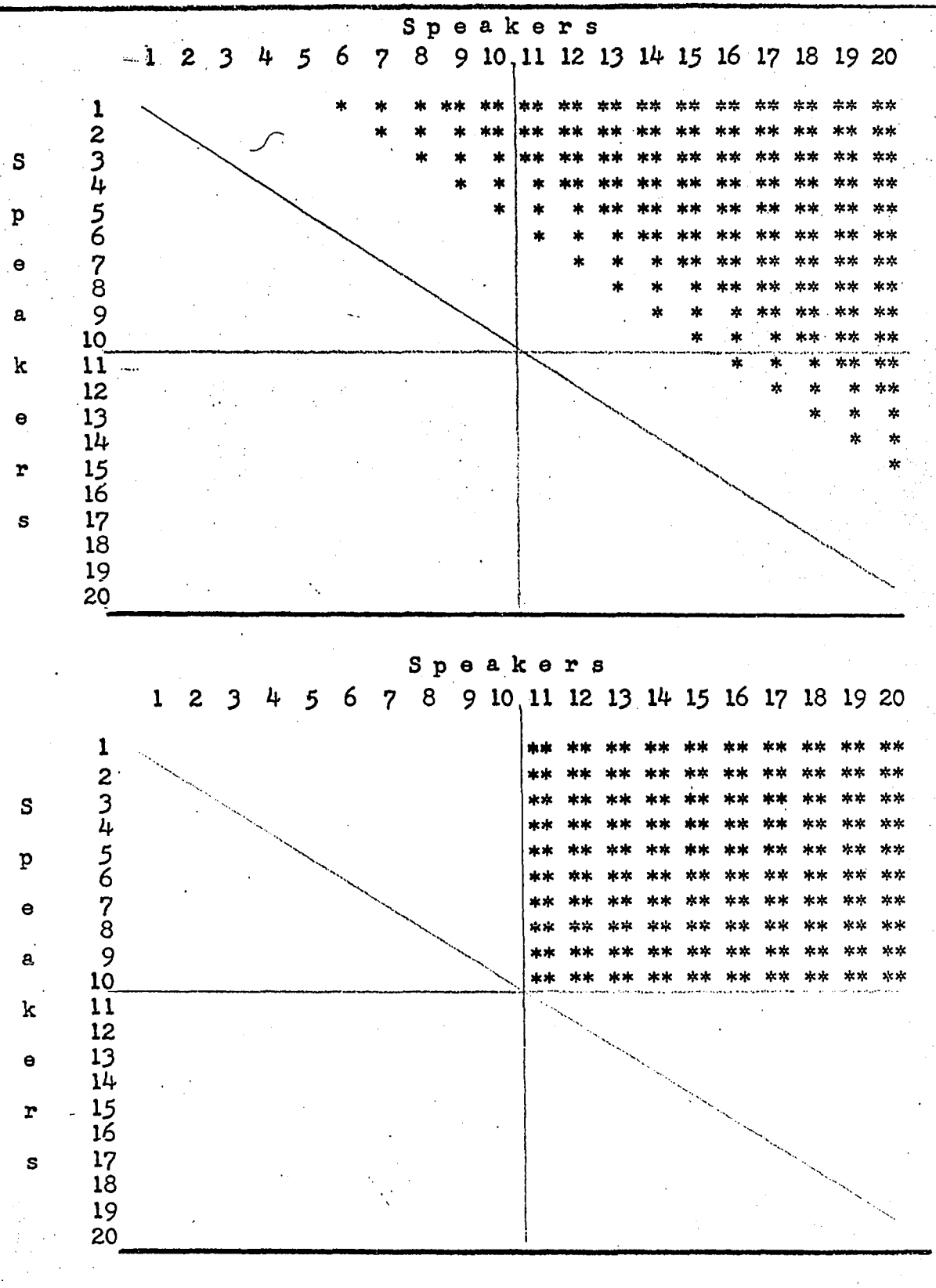


Figure 5. Theoretical Matrices
for Comparison with Figure 4



within the CD group. This pattern indicates that the AB group is more homogeneous than the CD group, and that speakers in the AB group are markedly different from any speakers in the CD group (with the exception of D1 who is rated like an AB speaker).

Conclusions. Karl Marx theorized that the fundamental social reality is the division between the bourgeoisie and the proletariat. With respect to French Canada, Falardeau (1953, p. 118) states that "the most universally felt social cleavage is that between white-collar workers as a whole, and industrial and unskilled workers as a whole." The evidence of this study up to this point indicates that this same dichotomy is the basis of the judgments French Canadian boys make of the occupational level of adult French Canadian males. It might be that French Canadian boys would make finer discriminations if they were given more cues than just the recorded speech. It may also be that more mature or more sophisticated judges could make finer discriminations. Conversely, it could be that the bourgeoisie - proletariat distinction is the only meaningful social class judgment French Canadians can make of one another on the basis of limited interaction. This matter merits further study.

If the Marxian dichotomy applies to other societies, the findings of differential speech patterns for the two groups should also apply. There is some evidence on this matter, although it is not conclusive. For example, Putnam and O'Hearn (1955), and Harms (1961) have found correlations of approximately .80 between SES level and judgments of SES from speech using Negro speakers from a variety of regions in the United States, and Ellis (1967) has also found the same correlation

using college freshman speakers from various U. S. regions. The amount of association these researchers find between actual SES and judgments of SES from speech is very comparable to the amount found in the present study. (A correlation of .80 is indicative of 64% common variance between the two variables, and 67% common variance between actual SES category and judged SES was found in this study.) However, in this study, the accuracy of judges was found to be due entirely to their ability to discriminate bourgeoisie level speakers from proletariat level speakers.[3] Perhaps upon closer analysis, the accuracy of Putnam and O'Hearn's, Harms', and Ellis' judges would be found to also be centered around this dichotomous split.

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[3] In view of the finding that only two levels of SES are salient in the perception of French Canadian father speakers, the terms "upper class" and "lower class" will be used to refer to those of Blishen level 2 and above or those of level 3 or below. No reference will be made to "middle class" since French Canadian boys do not seem to recognize such a group. (In traditional sociological usage "upper class" would probably correspond to only the aristocrats in this study, but here it will refer to all of the "white collar" workers.)

Judgments of Personality Traits and Ability from Speech.

Now that it has been determined that listeners can discriminate two major categories of backgrounds of speakers, it is of special interest to know what personality traits listeners attribute to each of these groups, that is, what their perceptions are of these two groups and what underlies the major contrast between the two groups. Some of the answers to this question are displayed in Table 4. As in the judgments of SES, the major differences in adjective ratings appear around the AB - CD comparison. Although a few of the A vs. B comparisons and the C vs. D comparisons exceed the chance level, none of the contingency tables for these comparisons have greater than chance level (.05) probabilities, and only in the case of two adjectives, religieux and fort, do these comparisons account for more than 6% of the variance in speakers' average received ratings. With regard to the major comparison, however, the strongest impression that raters have of upper SES level speakers (categories A or B) as compared with lower SES level speakers (categories C or D) is that they are more intelligent,[4] ambitieux, sûr de soi, beau, actif and sincère. Table 4 shows that the difference between the A + B and the C + D averages on each of these adjectives exceeds the .005 level of confidence. On each of four of the adjectives (intelligent, sûr de soi, ambitieux, and beau), the AB - CD dichotomy accounts for more than 55% of the variance in average received ratings. (This is comparable to a correlation coefficient

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[4] For convenience, only one of the adjectives of each pair is named. Both of the adjectives for each of the 19 trait scales are given in Figure 1.

of about .75 between the SES dichotomy and received ratings.) Over 42% of the variance is accounted for in the ratings received on each of the two adjectives _active_ and _sincère_.

The contingency tables for these adjectives all fit the pattern shown in Table A of Figure 6, with only one speaker from each SES group falling outside of his predicted category. This is the same pattern that was found for received occupational ratings (Figure 3), and its probability of chance occurrence is less than .005.

Figure 6. Contingency Tables for the Relationship Between SES Categories and Personality Rating Adjectives

Contingency Table A

SES Category	Category of Average Received Ratings: Highest 9	Lowest 11
A + B (N = 9)	8	1
C + D (N = 11)	1	10

(exact test, probability $< .005$)

For adjectives:

intelligent
ambitieux
sûr de soi
beau
actif
sincère

Contingency Table B

SES Category	Category of Average Received Ratings: Highest 9	Lowest 11
A + B (N = 9)	7	2
C + D (N = 11)	2	9

(exact test, probability $< .01$)

For adjectives:

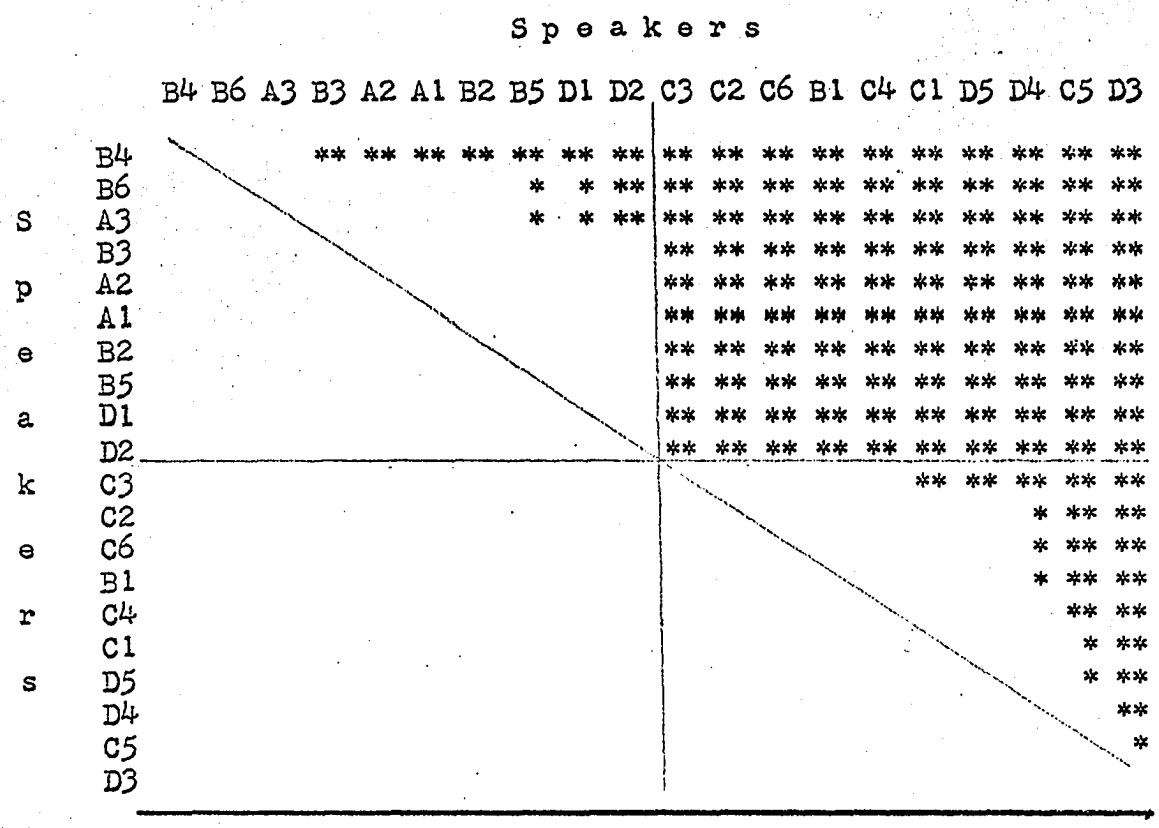
grand
fiable
poli
sévère
courageux

Figure 7 shows how powerful the SES dichotomy is when corrected for discrepancies in educational level. An almost perfect cleavage in the pattern of received ratings (refer back to Figure 5 for comparison) occurs between speaker D2 and speaker C3, and this division separates the A and B speakers (with the two over-educated category D speakers included) from the CD speakers (with the exception of B1). B1 is an under-educated speaker for category B, having the lowest educational level of anyone in that category. There are no exceptions to the predictions from the SES dichotomy other than those that would be expected on the basis of educational background discrepancies.

The second order impression that raters have of A and B category speakers, as compared to those in the C and D categories, is that they are more grand, fiable, poli, sévère, and courageux. Note the reversal on the sévère-tolérant dimension in the sense that the usual trend is for the higher SES speakers to be rated more favorably. SES accounts for between 36% and 50% of the variance in received ratings on each of these adjectives (comparable to correlations between .60 and .70). The contingency table that fits each of them is shown in Table B of Figure 6, and the probability of this particular table resulting from a chance occurrence is less than .01.

There is a slight tendency for the higher SES speakers to sound more juste, aimable, and sociable. The differences between averages on these adjectives are all statistically significant, while the contingency table results are not. This indicates that although the average for the AB group of speakers is sufficiently different from the average of the CD group on

Figure 7. Matrix of Chance Probabilities of Differences Between Each Father Speaker and Every Other Father Speaker on Average Received Ratings of Intelligence



Note.- For an explanation of the meaning of the symbols of this table, see Table 4 and the explanation for Table 4 on page 24.

these adjectives to account for 22% to 36% of the variance in average received ratings, the AB - CD dichotomy does not predict well which speakers will be in the upper half in received ratings on these dimensions.

The remaining adjectives, comique, gentil, religieux and fort, are relatively independent of the Blishen SES levels of the speakers. Although the difference between averages for the AB and CD groups exceeds chance level in two cases, in no case does the AB - CD dichotomy account for more than 10% of the variance in speakers' average received ratings on these adjectives, and the results of the contingency tables do not exceed chance level.

With regard to the religieux dimension there is a small difference between the aristocrats (category A) and all other Blishen level 1 and 2 speakers (category B), with the aristocrats being seen as less religious. On the fort-fiable dimension the difference is between category C and category D speakers, with category D speakers being rated as weaker. Most of this difference is due to the received rating of one particular speaker, D4, who received the lowest average rating on fort-fiable. When the differences in the average received rating between each speaker and every other speaker are compared in matrix form (similar to Figures 4, 5, and 7), none of the differences between speakers exceeds the chance level with the exception of this speaker, D4. Furthermore, his average rating is significantly different (beyond the .01 level in every case) from that of every other speaker in the sample. Table 1 shows that D4 has fewer years of education than anyone else in the sample, and he is the only speaker in the sample who is less educated than his wife. These background factors

might be important leads as to why one speaker is rated so much lower on the fort-fiable adjective. D4 is also rated lowest on other adjectives such as sincère, sûr de soi, courageux, actif, etc.

From the preceeding paragraphs it appears that some adjectives give redundant information, that is, the ratings given speakers on one adjective are almost the same as those given them on another adjective. Factor analysis is a very useful mathematical technique for reducing many redundant dimensions into a few major non-redundant dimensions called factors. In this study the factor analysis is based upon the theoretical assumption that raters judge speakers on two or three factors or major dimensions, and that the adjective ratings are then made up of varying combinations of these factors. If these assumptions are valid, the resultant factors would be expected to make sense conceptually and to account for almost all of the variance in adjective ratings.

Two very clear factors emerge from the factor matrix of ratings of fathers (Table 5). The first factor comprises a network of traits, principally intelligent, beau, ambitieux, sûr de soi, and actif, and will be referred to as the competence factor, to indicate that this cluster of traits chracterizes a competent person. Factor II is made up of the traits gentil, sociable, content, comique, and aimable and seems to reflect a dimension of benevolence. Since the two are independent, knowing a speaker's position on one dimension gives no information about the other.

Figure 8 shows graphically the relationships between the adjectives and the factor vectors. The factor-adjective relationships seem to be plausible and clear. Of course the adjectives near the factor axes

Table 5. Rotated Factor Matrix for the 19 Adjective Ratings and the Occupational Rating of Father Speakers

	Factor Loadings		Proportion of Unique Variance in Each Adjective
	Factor I (Competence)	Factor II (Benevolence)	
Occupational SES	.96	.16	.06
Intelligent	.95	.13	.08
Beau	.96	.14	.07
Ambitieux	.91	.35	.04
Sûr de soi	.88	.38	.08
Actif	.88	.38	.08
Tolérant	-.88	.04	.23
Grand	.87	-.03	.25
Sincère	.81	.51	.08
Fiable	.74	.49	.22
Poli	.63	.69	.13
Courageux	.82	.49	.09
Juste	.67	.66	.11
Aimable	.47	.80	.14
Sociable	.47	.84	.08
Comique	-.41	.83	.15
Gentil	.13	.95	.08
Religieux	-.49	.50	.51
Fort	.70	.37	.38
Content	.47	.83	.09

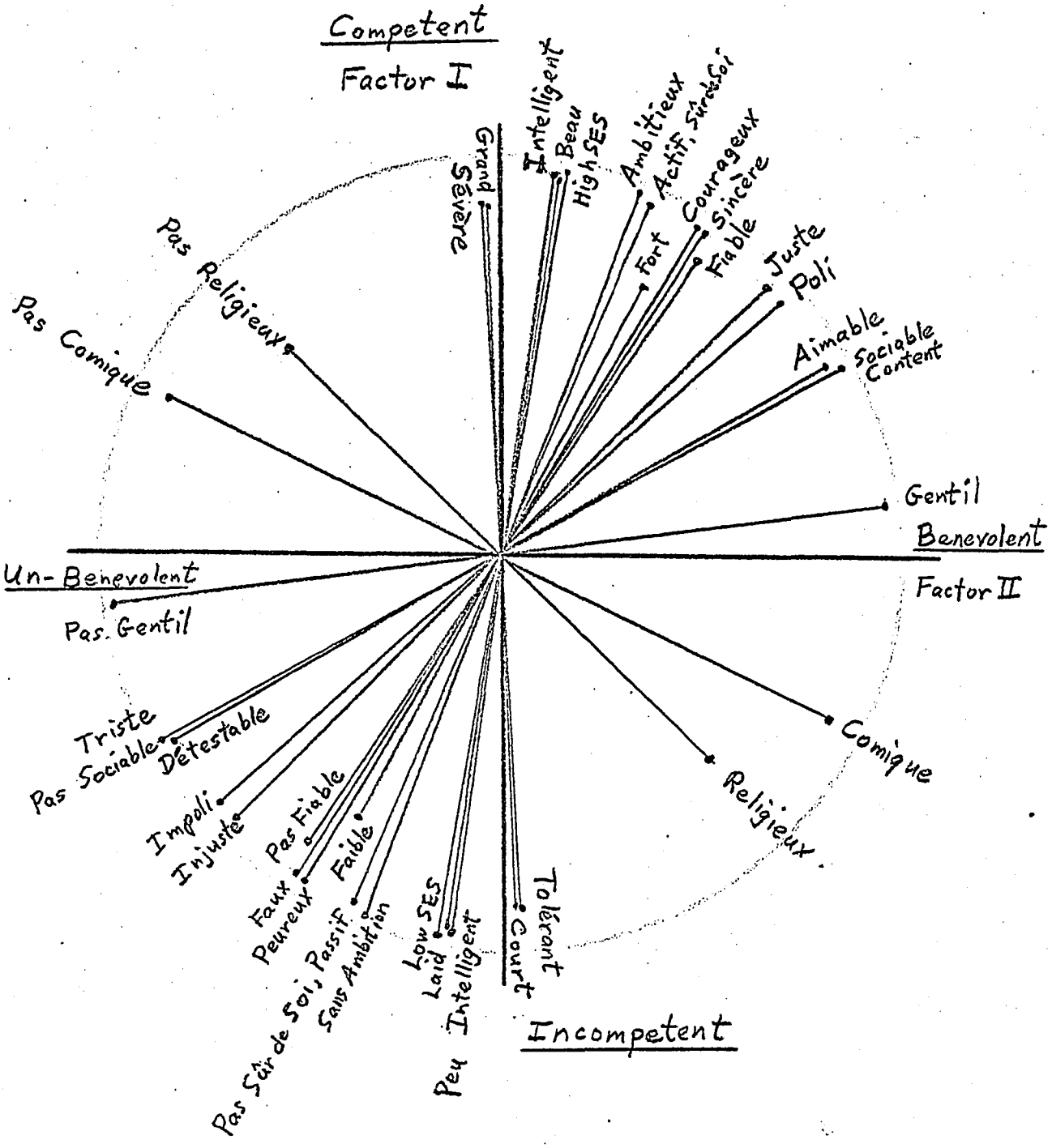
Explanation of Table 5:

1. The coefficients listed under each factor are factor loadings, and are indicative of the amount of correlation between each of the adjectives and the factor.

2. This factor matrix was obtained by means of the Jacobi-Kelly Principle Axes method with a Varimax rotation of factors.

3. The communalities are indices of how much of the variance in each adjective dimension is explained by the two factors. Communality for each adjective is equal to the sum of the squared loadings. The uniqueness (third column of this table) is equal to one minus the communality and expresses the amount of variance in the adjective not attributable to the factors employed.

Figure 8. Graphic Representation of the Rotated Factor Pattern for the 19 Adjective Ratings and the Occupational Rating of Father Speakers



correspond conceptually quite well to those factors (since the factors were named from them), but the test of factor clarity is the plausibility of adjectives which combine the factors. Such traits as juste, poli, and fiable are logical combinations of competence and benevolence. They obviously are related to benevolence but, unlike gentil, traits such as juste and fiable imply a degree of individual competence as well as benevolence. Also, it is not surprising to find poli linked to high SES, since manners and rules of etiquette are very much linked to the upper SES levels.

The factor analytic model seems to fit the data very well, not only from the standpoint of the factors being conceptually clear in their relationships to the adjectives, but also from the standpoint of the amount of variance in adjective ratings attributable to the factors. The first factor accounts for 67% of the total variance in the 20 adjective ratings (including occupational rating), and the second accounts for 18%.[5] The two factors together, then, summarize 85% of the total variance in average received ratings on the 21 adjectives. The third column of Table 5 shows how much unique variance is left in each adjective beyond the variance accounted for by the factors. Religieux has the greatest amount of unique variance at 51%. Fort has 38% unique variance and grand, tolérant, and fiable each have between 22% and 25%. The rest of the adjectives are very adequately summarized by the two factors, having only 4% to 15% unique variance each.

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5. These figures were derived from the eigenvalues

It is important to note that those adjectives that correspond most closely to the competence factor are also the adjective ratings which were found to be most predictable from the SES dichotomy, suggesting that the general impression of competence a speaker gives in his speech is closely related to his position in the SES dichotomy. Since the SES dichotomy was found to be an even better predictor of received ratings on these adjectives when it was corrected for education, a speaker's education should also be closely linked to the impression of competence which he gives. When scores on the competence factor and the benevolence factor are computed for each speaker, the competence scores for speakers are found to correlate .67 with their SES level and .73 with their educational level. (Figure 41 in Chapter IV shows graphically the relationship between Factors I and II and speaker SES, education, and other background data.) These correlations demonstrate that both SES and education are good predictors of the competence impression. However, SES is virtually independent of the impression a speaker gives on the benevolence dimension and education is only very slightly positively related. An interesting subject for future research would be an analysis of the elements that lead to the benevolence impression.

Factor analysis is a very useful probe into the "implicit personality theory" held by the rater, "implicit" in the sense that a rater would probably not say that people who are more competent and more intelligent are also taller, better-looking and more severe, but he seems to make his judgments on the basis of this theory. That is, whenever he gives a

speaker a high rating on one of these traits, he nearly always gives him a high rating on all of the others.

It is especially interesting that the implicit personality theory held by French Canadian 10th and 11th grade boys in Montreal links grand and beau with intelligence in adult males. It brings to mind the stereotype that peoples of Latin origin, including French Canadians, are short. Lambert, Hodgson, Gardner and Filenbaum (1960), using their matched-guise technique, found that both French Canadians and English Canadians agree that French Canadians are shorter than English Canadians and not as good-looking. Both groups also saw French Canadians as having relatively less intelligence, ambition, and dependability. These results combined with the factor pattern of the present study suggest that the young men in French Canada picture members of their own culture as being lower on the competence factor (which for them includes height and attractiveness) than members of the comparison group (English Canadians), and in addition, the upper class members of their culture are seen as being higher on the competence factor and thus more similar to the English Canadians than members of the lower classes.

The Lambert, et al., study also suggests a hypothesis concerning elements that could account for the benevolence impression. They found that English Canadians and French Canadians each see their own groups as being kinder. This suggests that a person's reference or membership group is seen as being more benevolent than "out groups." Markel (1965) has found that speakers with the same regional dialect as the rater are

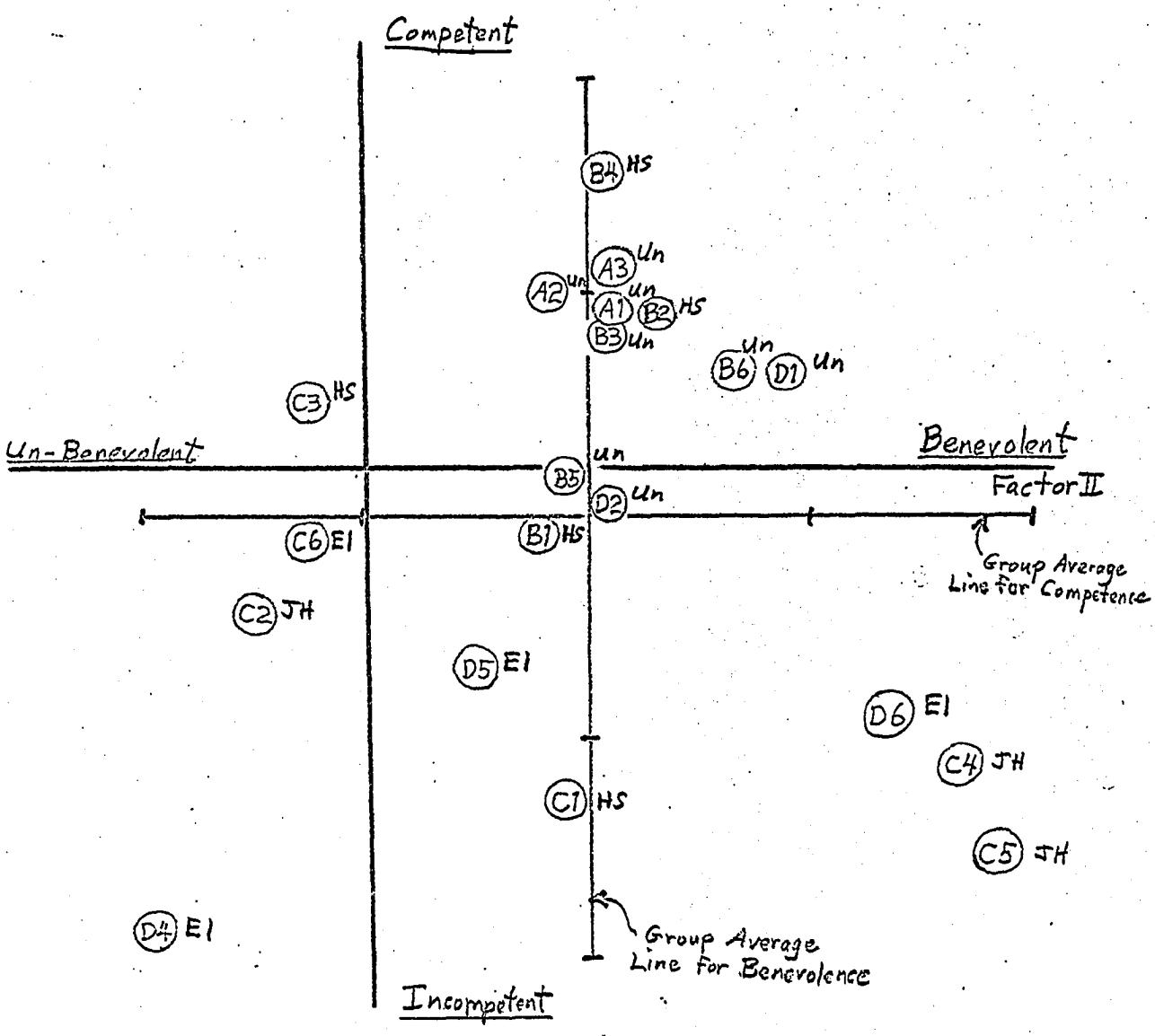
rated higher on character than those with a different dialect. A parallel hypothesis is also suggested, that one of the main determinants of how benevolent a speaker sounds might be the degree of similarity of his speech to that of the rater. These ideas will be examined further in the next section with the analysis of raters reactions to speakers from France.

Figure 9 shows the final position of each speaker as determined by his computed score on both factors. These factor scores for each speaker are only approximations (since the computation of them assumes that the adjective ratings are all perfectly summarized by the factors with no unique variance.) However, Figure 9 is useful in that it displays graphically the general impression that raters in general have of the speakers, emphasizing those elements that are common among the sample of 85 raters.

The most obvious characteristic of this general impression is the previously demonstrated usefulness of the SES dichotomy in predicting whether speakers will be rated high or low on competence. In general, the A and B speakers are in the upper quadrants (high competence) and the C and D speakers are in the lower quadrants (low competence). It is also apparent that the ratings of A and B speakers on the benevolence dimension focus quite closely around the speaker average, while speakers from the C and D categories range from extremely high in benevolence to extremely low. This suggests that lower SES speakers would be more crucial in a study aimed at identifying the predictors of the benevolence impression than would high SES speakers.

The final observation with respect to the adjective ratings is that

Figure 9. Plotting of Each Father Speaker According to His Received Score on the Competence Factor and on the Benevolence Factor



Explanation of Figure 9:

1. The axis labelled Un-benevolent - Benevolent is an estimate of the zero point on the competence factor, and the axis labelled Competent - Incompetent is an estimate of the zero point on the benevolence factor. (Since the factor scores must be computed as standard scores, the zero points must be estimated.)

2. Since the scores of each speaker on both factors are standard score estimates, the actual spread on received ratings is distorted by this graph. In actuality, the variance in received ratings on adjectives that correspond to the benevolence factor are about half as great as the variances on those that correspond to the competence factor. If raw scores on these factors were computed for each speaker, the horizontal distances between speakers on this graph would be cut approximately in half, while vertical distances would remain the same.

3. The subscript after each speaker's symbol indicates the educational level of that speaker:

Un = beyond high school
HS = high-school graduate
JH = 9th grade or beyond
El = less than 9th grade

4. The small marks along the group average lines for the two factors mark off standard deviations from the group averages.

Illustrations of the Relationship Between Figures 8 and 9:

Speakers C4 and C5 are the most extreme subjects in the lower right quadrant (high benevolence, low competence) of Figure 9. Since the comique adjective also corresponds to high benevolence and low competence (refer to Figure 8), and since the comique adjective has very little unique variance (column 3 of Table 5), C4 and C5 would be expected to be high on this adjective. In examining the raw data (not presented here) they are found to be the two highest on comique. (Those adjectives with smaller amounts of unique variance are more predictable from the factors.)

Another example of the correspondence of the plots of this figure with the information in Figure 8 is speaker D4. He is the most extreme speaker in the lower left quadrant (low benevolence and low competence) and he is also the speaker who is rated lowest on fort (as described earlier), sincère, sûr de soi, courageux, actif, etc. There are no speakers who exemplify extreme combinations of competence and benevolence in the two upper quadrants, since the benevolence scores of high SES speakers center around the group average.

raters agree in their judgments on some adjectives much more than they do on others. Table 6 gives the reliabilities, confidence level, and variance for each adjective. In general, raters agree most in their judgments on adjectives that correspond most nearly to the competence factor. These adjectives are also the most strongly related to the SES of the speaker. Conversely, there is much less inter-rater agreement on those adjectives that correspond most closely to the benevolence factor, i.e., the adjectives unrelated to SES.[6] Thus, it may be easier to ascertain a person's SES level, intelligence, self-confidence, etc., from his speech than it is to ascertain his kindness, sociability, etc. These latter traits may require deeper acquaintance for accurate judgments. It would be interesting to know whether raters could reach as high a level of agreement on benevolence traits under deeper levels of acquaintance with the speakers as they have now reached on competence traits.

Hollingsworth (1922) has obtained findings similar to these. He found that there is much more inter-rater agreement on what he calls "objective Class A" traits than there is on the more "subjective Class C" traits. Class A traits are more objective in that they represent "reactions to objects and impersonal situations." That is, they are traits that determine how a stimulus person will react to objects, whereas Class C traits are traits that determine how a stimulus person will react to "the presence and character of other persons." The benevolence factor adjectives certainly fit his description of Class C traits, and although competence adjectives can also be interpersonal or "subjective" traits, they are much more "objective" in Hollingsworth's terms than are the benevolence adjectives.

Table 6. Reliabilities, Confidence Level, and Variance of Received Ratings for Each Adjective: Father Speakers

Personality Adjectives Grouped According to Their Relatedness to the SES Dichotomy		Estimate of Inter-rater Reliability	Estimate of Reliability of Average Received Rating Scores	Confidence Levels for Average Received Ratings	Standard Deviations of Average Received Ratings
Strongly Related	Occupational SES	.23	.95	.005	.689
	Intelligent	.37	.98	.005	1.047
	Sûr de soi	.25	.97	.005	1.006
	Beau	.24	.96	.005	.702
	Ambitieux	.18	.93	.005	.753
	Actif	.20	.95	.005	.832
	Sincère	.10	.87	.005	.483
Moderately Related	Grand	.08	.88	.005	.477
	Fiable	.07	.84	.005	.407
	Poli	.05	.81	.005	.393
	Tolérant	.05	.81	.005	.465
	Courageux	.13	.93	.005	.597
Slightly Related	Juste	.04	.78	.005	.344
	Aimable	.03	.67	.005	.272
	Sociable	.04	.78	.005	.352
Virtually Unrelated	Comique	.07	.88	.005	.562
	Gentil	.04	.71	.01	.311
	Religieux	.01	.55	.01	.262
	Fort	.07	.83	.005	.428
	Content	.10	.87	.005	.479

Note.- The reliability estimates given in the first two columns were calculated from the analysis of variance on each adjective according to the method described in Winer, pp. 124-132, and the confidence levels for speakers' average received ratings (the third column) are from the F ratio in this analysis of variance which test the variance due to speakers. The confidence levels are the probabilities for each adjective of the obtained differences between speakers in average received ratings being due to chance.

Although the inter-rater reliability on some adjectives is quite low, column 2 of Table 6 shows that the average ratings received by each speaker are quite stable. With the exception of religieux, which has an average received rating reliability of .55, the lowest reliability is .67. This indicates that if another sample of 85 raters were used, the obtained adjective ratings and factor analysis pattern would be generally the same.

Conclusions. The strongest impression high school boys get of men the age of their fathers from their speech is that of their relative competence. Although the ratings speakers receive vary widely, the gradation is not continuous, but fits into a clear dichotomy which has been found to correspond perfectly to the division of speakers into upper and lower class according to their occupations corrected for educational level discrepancies.

The secondary impression is centered around the benevolence dimension. Although SES is not a good predictor of the benevolence impression, the two SES groupings do differ with respect to this dimension in that the low SES group has much more extreme (both negative and positive) examples of this dimension than does the high SES group.

Not only is the competence impression the strongest, but it is also the one on which raters find the most agreement. Benevolence seems to be much more an idiosyncratic kind of judgment. French Canadian boys use both of these dimensions in their ratings of adult French Canadian men.

From a psychologist's point of view, the social status index that is most useful is the one that will predict the way people perceive one another and interact with one another. It seems likely that in the early stages of acquaintance, speech characteristics are very important in

determining the impression one person has of another. If this is true, perhaps one of the most useful criteria for evaluating a social status index is its ability to predict the evaluations people make of one another from speech.

The speech index was used in this study to evaluate the usefulness of Blishen's scale of SES from occupation, and the scale was found to predict impressions from speech quite well, but only on the basis of two gross SES groupings. Whenever this occupational SES dichotomy failed to account for speakers' received ratings, the discrepancy was explainable by an examination of the speaker's educational background. Even though Blishen's occupational scores were derived by ranking and grouping occupations according to the income and education characteristic of each, the results from the sample of Montrealers used in this study suggest that in French Canada there are notable exceptions to the correspondence between education and occupation, and perhaps it is better to take both into account. Hollingshead (1959) has proposed this kind of two factor index. One big problem is that of deciding how much each factor should be weighted in obtaining a satisfactory social status score. The results of this study suggest that by using speech impressions as a criterion, the most useful combination of education and occupation in a social status index could be empirically determined.

The question also arises as to the significance of the different steps in SES scales such as Blishen's or Warner's. Are these six or seven steps psychologically meaningful separations or may there be a general tendency

with other age groups of judges (as has been found here for teen-age boy judges) to make only a differentiation between competent and incompetent people or nice and not nice people, suggesting that a crude dichotomy is all that can be used by most judges. If other criteria of social class perception are found to give the same results as the speech criterion, perhaps the whole notion of a progressive SES scale should be re-examined.

Ratings Given Continental French Speakers as Compared to Ratings Given French Canadian Speakers.

It seems to be rather widely held by both English and French Canadians as well as by Frenchmen that the French spoken by French Canadians generally is inferior in certain respects to that spoken by people from France. Is there anything inherently inferior about French as it has evolved in Canada, or are there other reasons that a higher prestige has been attached to Continental French? If upper class French Canadians feel that their language is inferior to that spoken in France, this could be symptomatic of a more general feeling of cultural inferiority. They may feel that members of their own culture are inferior in many other ways to members of the continental culture. The information of Table 7 suggests that such is the case. The speakers from France are rated higher than French Canadian speakers from the two upper categories (A and B)[7] on every adjective except religieux and fort, on which they are rated lower, and tolérant, courageux, and aimable, on which there is no significant difference between groups. The comparison between only aristocratic (category A) French Canadian speakers and speakers from France gives the same results, but with differences on three more adjectives, sincère, juste, and religieux, not being significant. Thus the Continental French are seen as being more intelligent, beau, ambitieux, sûr de soi, grand, sincère, fiable, poli, actif, juste, sociable, comique, gentil, content, and as

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[7] Since the speakers from France are all from the upper SES level, they are compared only to upper-class French Canadians.

Table 7. Statistics for Personality and Occupational Ratings of French Fathers Compared to Upper Class French Canadian Fathers - Total Group of Raters

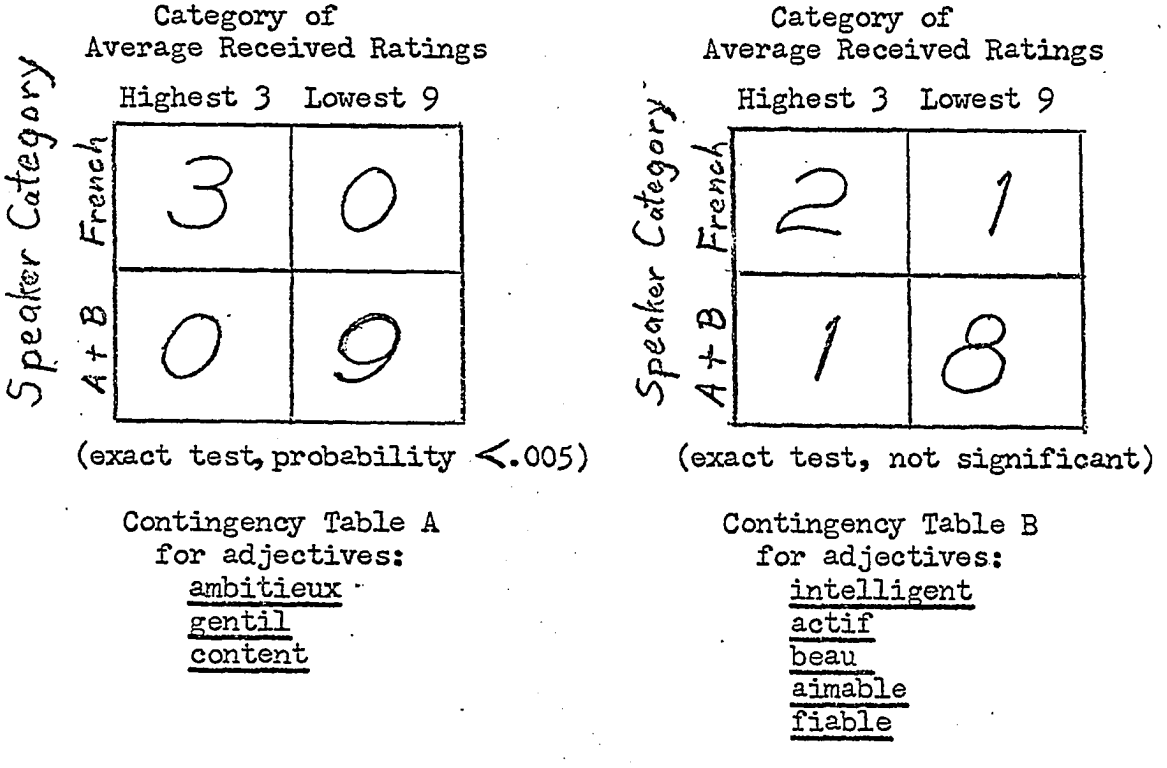
Judged Occupational	Speakers from France Compared to All French Canadians from the Upper Categories (A and B)			Speakers from France Compared to Aristocratic French Canadians Only		
	French A+B	%v	X2	French A	%v	X2
SES	3.0***3.8	.78	***	3.0***3.7	.44	*
Intelligent	2.5***3.3	.37		2.5***3.2	.20	
Beau	3.1***3.8	.39		3.1***3.8	.26	
Ambitieux	2.5***3.3	.66	***	2.5***3.2	.31	*
Sûr de soi	2.8***3.7	.56		2.8***3.6	.29	
Actif	2.7***3.3	.35		2.7 * 3.0	.06	
Tolérant	4.5 4.6	.00		4.5 4.6	.00	
Grand	3.4***4.0	.39		3.4***3.9	.22	
Sincère	2.8 * 3.0	.23		2.8 2.9	.00	
Fiable	2.9 **3.3	.50		2.9 **3.3	.42	
Poli	3.0***3.6	.81		3.0***3.7	.74	
Courageux	3.9 3.9	.00		3.9 3.8	.00	
Juste	3.2 * 3.5	.54		3.2 3.4	.11	
Aimable	2.9 3.1	.00		2.9 3.0	.05	
Sociable	3.0***3.5	.88		3.0***3.6	.69	
Comique	3.9***4.6	.75		3.9***4.6	.61	
Gentil	3.0***3.4	.81	***	3.0 **3.4	.86	*
Religieux	4.3 **3.9r	.40		4.3 4.1	.06	
Fort	3.8 **3.5r	.36		3.8 * 3.5r	.26	
Content	2.9***3.5	.79	***	2.9***3.4	.44	*

Note.- This table is read in the same way as Table 4.

being of higher occupational SES than French Canadian adult males from the A and B SES categories.

With such a small number of speakers in the comparisons of category F (Continental French) with categories A and B, the only contingency table that exceeds the chance level of significance is the one for the perfect split (shown in Table A of Figure 10). Received ratings of occupational SES, and the ambitieux, gentil, and content adjectives fit this pattern. Intelligent, actif, beau, aimable, and fiable fit the pattern of Contingency Table B in Figure 10.

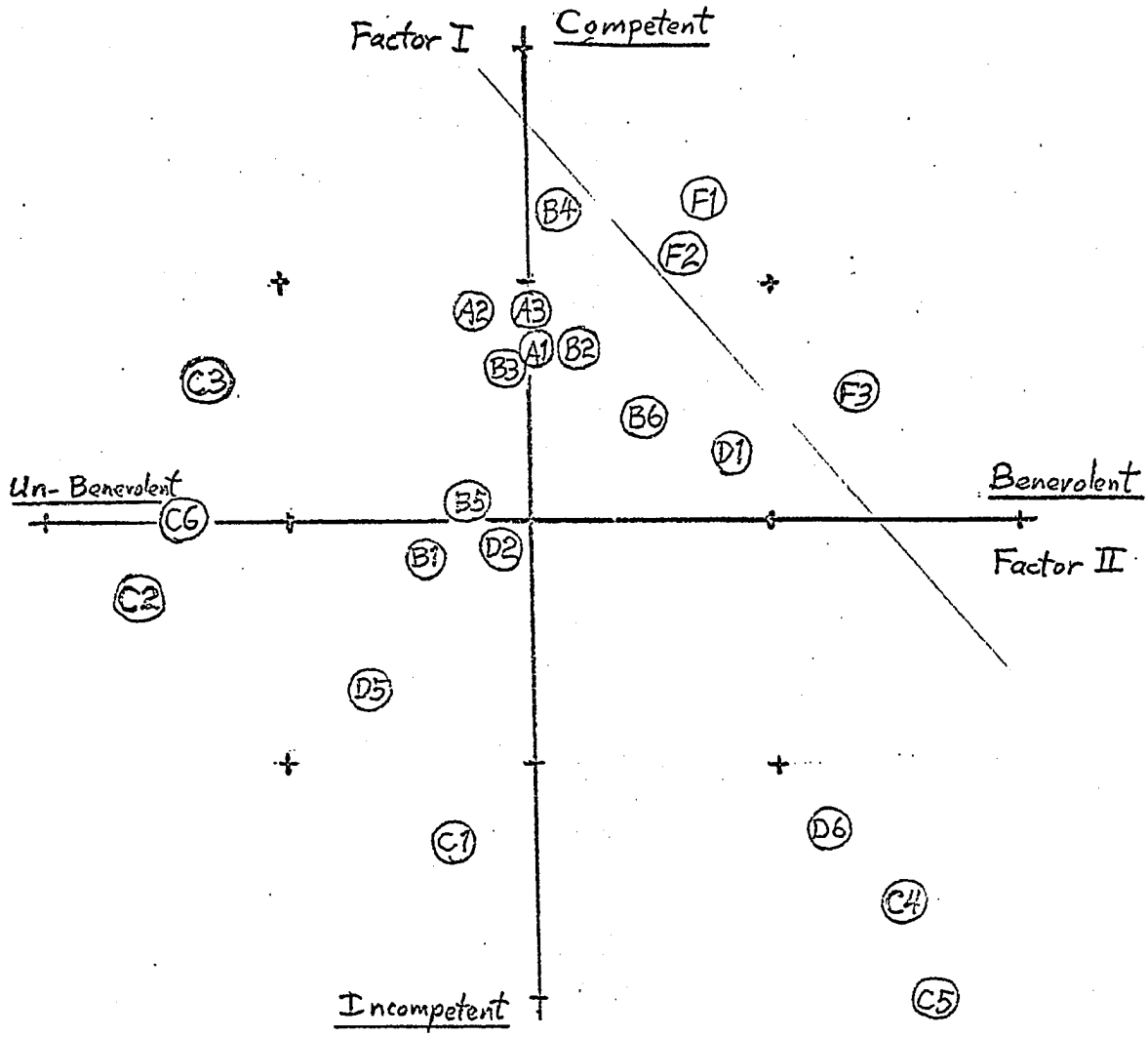
Figure 10. Contingency Tables for the Relative Ratings Received by Continental French and French Canadian Father Speakers



It is of special interest that the French are rated higher than French Canadians, not only on adjectives corresponding to the competence factor, but also on most of those corresponding to the benevolence factor. Lambert's work (cited in the previous section) has pointed to a feeling among French Canadians of being less competent than English Canadians, and it is not surprizing to see this feeling of relative incompetence extend to comparisons with people from France. Lambert also found that French Canadians rate English as less benevolent than themselves, but it has been found here that they rate French Continentals higher than themselves on benevolence as well as competence.

Figure 11 illustrates how the speakers from France are rated generally higher than the French Canadians on both dimensions. Although some upper class French Canadian speakers are rated as favorably as the speakers from France on competence, and some French Canadians from the lower classes are rated even higher on benevolence, the speakers from France are the unique examples of the combination of highly favorable ratings on both of these dimensions. Also, the Continental French speakers as a group are rated markedly higher on both of these dimensions than the upper class French Canadians as a group, in spite of the fact that the Continentals are compared to a group of speakers of generally higher Blishen SES level than their own. (The average Blishen level for upper class French Canadians in this study is 1.67, and that for the Continentals is 2.00, with smaller numbers denoting higher SES.) However, due to an oversight in the selection of speakers for this experiment, two of the three Continental

Figure 11. Plotting of Each Father Speaker According to His Received Score on the Competence Factor and on the Benevolence Factor -- Father Speakers from France Included



Note.- This figure is read in the same way as Figure 9.

French speakers are teachers, and only one of the 9 upper class French Canadians is. It is quite possible that teachers might sound more competent to students than someone else of equal or higher SES level. Figure 11 shows that the French Canadian teacher (B6) is rated higher on benevolence than other category A and category B French Canadians, but lower on competence than all but two of them. Also, he fits into the general area of the diagram occupied by French Canadians, while the three speakers from France cluster together in the upper right part of the diagram, quite separate and distinct. Thus the fact that two of the speakers from France (F1 and F3) are teachers is apparently not the determiner of the differences in ratings received.

One other important issue must be covered here before it can be concluded that French Canadian young men see upper class French Continentals as being more competent and more benevolent than their own upper class. There is the possibility that the raters couldn't detect that the category F speakers were from France, but thought they were upper class French Canadians. If this were the case, the results might actually mean that speakers from France sound like extremely competent and benevolent members of the French Canadian upper class, and the high ratings given these speakers would be better interpreted as a high regard among French Canadian boys for some men from their own upper class. An examination of the estimations raters make of the speakers' countries of origin (Table 8) reveals clearly that such is not the case. Even 10th and 11th grade boys have little trouble discriminating between the two groups. We conclude therefore that these

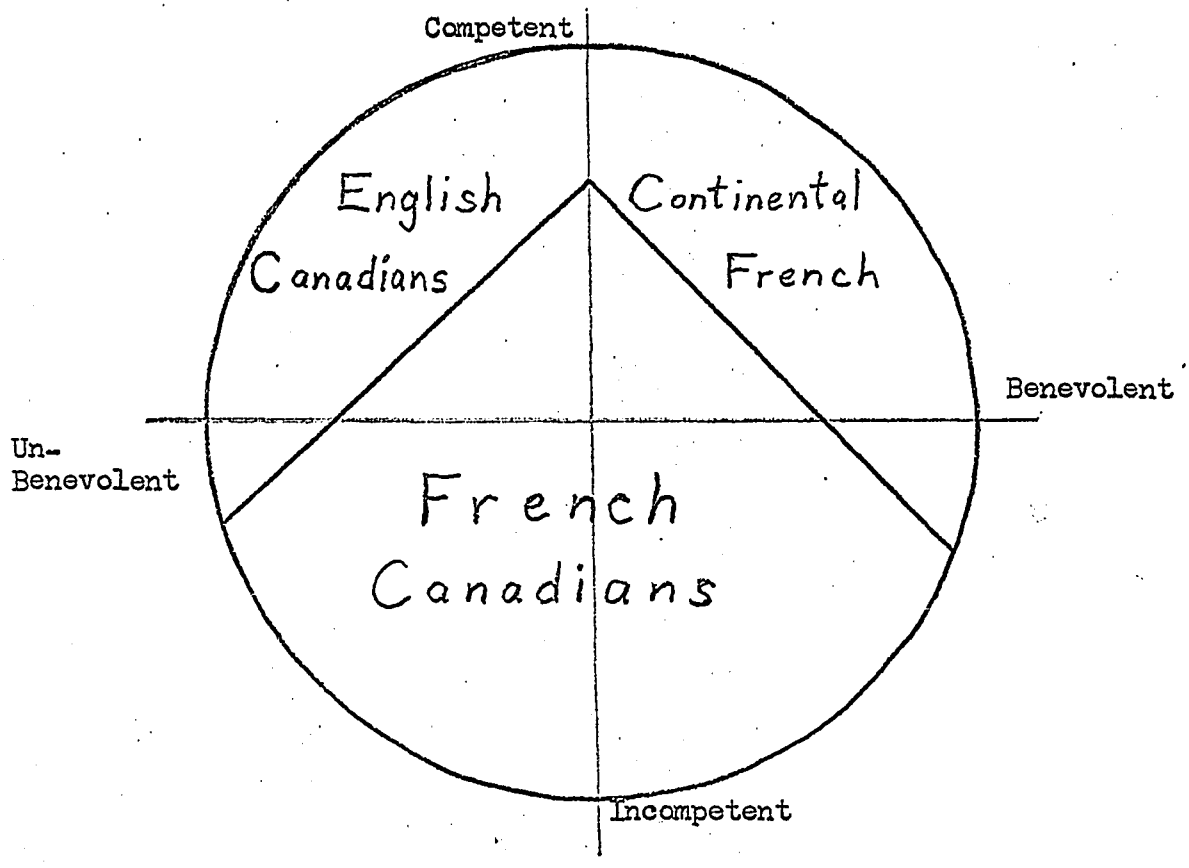
Table 8. Percentages of Raters Who Estimated Each Father Speaker to be from France Rather Than Canada

French Continentals (category F)	Aristocrats (category A)	Other Blishen Level 1 & 2 French Canadians (category B)
F1 ... 86%	A1 ... 8%	B1 ... 6%
F2 ... 74%	A2 ... 17%	B2 ... 4%
F3 ... 90%	A3 ... 11%	B3 ... 4%
		B4 ... 13%
		B5 ... 4%
		B6 ... 12%

young men see Continental French upper-class men as being more benevolent as well as more competent than men from upper-class French Canada. It would now be of interest to see how raters' evaluations of these Continental French speakers would change if they were misled to believe they were actually French Canadians (if raters could be misled in this way). Perhaps they would then downgrade the speakers, thinking it rather presumptious or pretentious for their own people to speak that way.

As was observed in the preceeding section there is very little variance among upper-class French Canadians on the benevolence dimension, most of them being quite close to the average for all speakers in their received ratings. It looks as though the extremes of benevolence for those of high competence are reserved for two other groups: high benevolence for the Continental French (as shown in this study) and low benevolence for the

Figure 12. Diagram of the Implicit Personality Theory of French Canadian Young Men with Reference to Adult Males



English Canadians (as shown by the earlier work of Lambert et al.). A diagram of the implicit personality theory French Canadian young men hold with reference to adult male speakers is given in Figure 12. Upper class Continental Frenchmen seem to be the heroes of French Canadian culture rather than French Canadian upper class males being the heroes, pointing

again to a feeling of cultural inferiority among French Canadians. An important next step in this line of research would be to find out how French Canadians evaluate lower class speakers from France compared with lower class speakers from their own culture.

English Canadians seem to be the villains in this picture. Although the French Canadians see some of their own group from the lower classes as also being low on benevolence (as the English Canadians are), they would probably not be considered a major threat to anyone since they are low on competence, success, and therefore power. On the other hand, the English Canadians, being seen as intelligent, successful and probably very powerful (especially economically), and also being un-benevolent, could pose a considerable threat.

On the competence dimension it seems that the scriptural principle that "a prophet is not without honor except in his own country" applies to the view French Canadians have of the economically successful members of their own culture, since they see both English and Continental French as being more competent. The finding that Continental French are seen by French Canadian boys as also being more benevolent than their own group seems to contradict the hypothesis that members of one's own group will be seen as being more benevolent than members of other groups. However, in predicting the relative evaluations of groups on benevolence it may not be a question of which group a person belongs to, but a question of which group he identifies with most. If it could be demonstrated that French Canadians identify strongly with the Continental French culture, that France

is for French Canada a cultural counterpart of what sociologists call a "reference group," the hypothesis could be tentatively put forth in a new form. It could be hypothesized that people see their reference group as being even more benevolent than their own group of membership, and that both of these groups are considered to be more benevolent than "out groups." It may be that a "hero group" or reference group is chosen from outside one's own culture, as is the case in French Canada, when one's own culture is considered to be lower in competence than other cultures. In the next section, the linguistic evidence for the proposal that France serves as the "reference culture" or "hero culture" for French Canadians will be considered.

Linguistic Differences Among Father Speakers.

Up to this point, an analysis has been made of the influence of two important speaker characteristics, SES level and country of origin (Canada or France), upon personality impressions. Since raters constructed the personality descriptions solely on the basis of speech differences, it should be possible to discover which speech parameters are expressive of SES differences and which are expressive of country of origin, and then show how these speech characteristics evoke the personality judgments and stereotypes. In the discussion which follows, the relationship between speakers' background characteristics and the relative impressions which they evoke will be broken into two links: that between background characteristics and speech patterns, and that between speech patterns and personality impressions.

Background and speech patterns. Table 9 displays the average ratings and scores received by each group of speakers of various SES levels and countries of origin (France and Canada) on 15 speech variables. The major SES split on these speech variables is between the upper class group of speakers (category A and category B) and the lower class group (category C and category D), just as it was with the personality ratings. According to the linguistic raters, the pronunciation of speakers in the AB group is more articulate and more accurate, they have a more continental accent, they have more intonation in their speech and the intonation is more accurate (appropriate), their voices aren't as hoarse or as breathy, they don't sound as nervous and hesitant nor do they stumble over words as much. In

Table 9. Linguistic Ratings of Father Speakers Analyzed According to Speakers' SES Levels and Countries of Origin

	Upper-class French vs. Upper-class French Canadians				Groupings According to Speakers' Occupational SES Levels											
					total	AB vs. CD			A vs. B				C vs. D			
A. Linguistic Ratings.	French	A+B	%v	X2	%v	A+B	C+D	%v	X2	A	B	%v	X2	C	D	%v	X2
Prononciation:																	
1) Articulée, marquée	1.2	***3.1	.86	***	.70	3.0	***4.8	.67	***	2.7	3.2	.01		4.5	5.1	.02	
2) Juste	1.6	***4.2	.84	***	.93	4.1	***5.9	.85	***	3.5	**4.4	.08	*	5.9	6.0	.00	
Accent:																	
3) Continental	1.8	***5.9	.99	***	.95	5.8	***6.7	.95	***	5.7	5.9	.00		6.6	6.7	.00	
Vitesse du monologue:																	
4) Rapide	4.2	4.1	.00		.00	3.8	4.0	.00		3.6	3.9	.00		4.0	4.1	.00	
Intonation:																	
5) Beaucoup	1.2	***4.3	.68	***	.38	4.3	***5.8	.29	*	3.8	4.5	.02		6.2	**5.2r	.07	
6) Juste	1.7	***4.6	.71	***	.76	4.4	***6.3	.75	***	4.4	4.4	.00		6.5	6.1	.01	
Particularités de la voix:																	
7) Aiguë (Basse)	2.9	***4.9	.61		.39	4.8	4.8	.00		4.4	5.0	.03		5.4	***4.0r	.36	
8) Douce (Rauque)	3.5	3.7	.00		.36	3.7	**4.5	.32		3.5	3.8	.00		4.8	4.2	.04	
9) Peu haletante	2.0	* 2.9	.31		.49	2.8	***4.1	.49	*	3.1	2.7	.00		4.2	4.0	.00	
Particularités de l'individu:																	
10) Assuré et détendu	2.0	* 3.1	.22		.52	3.0	***5.0	.48	*	3.4	2.9	.01		5.3	* 4.6r	.03	
11) Mots coulent sans accrocs	1.8	**3.5	.28		.60	3.3	***5.5	.49	*	3.7	3.1	.00		6.1	***4.8r	.10	
B. Linguistic Tallies.																	
12) Canadianisms	0.0	***7.6	.92	***	.44	7.7	* 9.3	.40		7.9	7.6	.00		9.8	8.7	.04	
13) Mispronunciations	0.8	0.6	.22		.56	0.5	* 1.2	.50		0.3	0.6	.00		0.9	1.4	.06	
14) Hesitations	0.0	**0.5	.10	***	.26	0.4	**1.4	.25	*	0.8	0.2	.01		1.3	1.3	.00	
15) Time for passage	160	***148r	.05		.19	142	***171	.18		140	142	.00		167	***175	.01	

Explanation of Table 9:

1. This table is read in the same way as Table 4. The lower the average the more the group was rated to have the trait listed. Since only the positive half of the trait scale is listed, low averages indicate positive ratings. When necessary, the negative opposite is given in parentheses. For some traits of speech, such as pitch, it is difficult to determine which extreme is more positive.

2. The average speaker ratings in the A+B column will often be slightly different in the comparison with the mean of speakers from France than they are when compared to the mean of the C+D speakers. This is because one rater didn't rate all of the French voices and had to be dropped in that comparison.

Table 9a. Reliabilities of the Linguistic Ratings Given to Upper- and Lower-class French Canadians and Also of Those Given Continental French in Comparison with Upper-class French Canadians

	Reliabilities for Continentals Compared to Upper-class French Canadians			Reliabilities for Upper-class Compared to Lower-class French Canadians		
	Estimate of Inter-rater Reliability	Estimate of Reliability of Average Received Rating Scores	Confidence Levels for Average Received Ratings	Estimate of Inter-rater Reliability	Estimate of Reliability of Average Received Rating Scores	Confidence Levels for Average Received Ratings
A. Linguistic Ratings.						
Pronunciation:						
1) Articul[illegible] marquée	.36	.69	.01	.43	.75	.005
2) Juste	.59	.86	.005	.58	.85	.005
Accent:						
3) Continental	.67	.89	.005	.37	.70	.01
Vitesse du monologue:						
4) Rapide	.49	.79	.01	.67	.89	.005
Intonation:						
5) Beaucoup	.68	.90	.005	.66	.89	.005
6) Juste	.64	.88	.005	.59	.85	.005
Particularités de la voix:						
7) Aiguë	.48	.79	.01	.37	.70	.01
8) Douce (Rauque)	.00	.02	n.s.	.29	.62	.01
9) Peu haletante	.20	.51	.05	.38	.71	.01
Particularités de l'individu:						
10) Assuré et détendu	.38	.72	.05	.62	.87	.005
11) Mots coulent sans accrocs	.45	.77	.01	.62	.87	.005
B. Linguistic Tallies						
12) Canadianisms	.68	.87	.005	.15	.34	n.s.
13) Mispronunciations	.12	.50	n.s.	.13	.31	n.s.
14) Hesitations	.74	.90	.005	.36	.63	.01
15) Time for passage	.95	.97	.005	.98	.99	.005

Refer to Table 6 for further explanation of these reliability statistics.

addition, when each speaker's reading of the passage is scored and the number of Canadian pronunciations, mispronunciations and hesitations are tallied, the AB speakers have significantly fewer of each of them than do CD speakers.

Eight of the fifteen speech variables used are highly related (49% common variance or more) to SES and five more are moderately related (26% to 39% common variance). Also, from the matrix of intercorrelations between speech variables (Table 10), it is clear that most of the variables are quite related to one another for the speakers in this study. A factor analysis does not help to clarify them since most of the variance is due to one large factor (consisting of the variables that are closely related to speaker SES) and there is no conceptually clear second factor orthogonal to it. Although some speech variables are more related to one another than others, they are all quite related to each other and the schematic diagram of Figure 13 is used to show the major clusterings of the linguistic variables and the relationships of the clusters to one another.

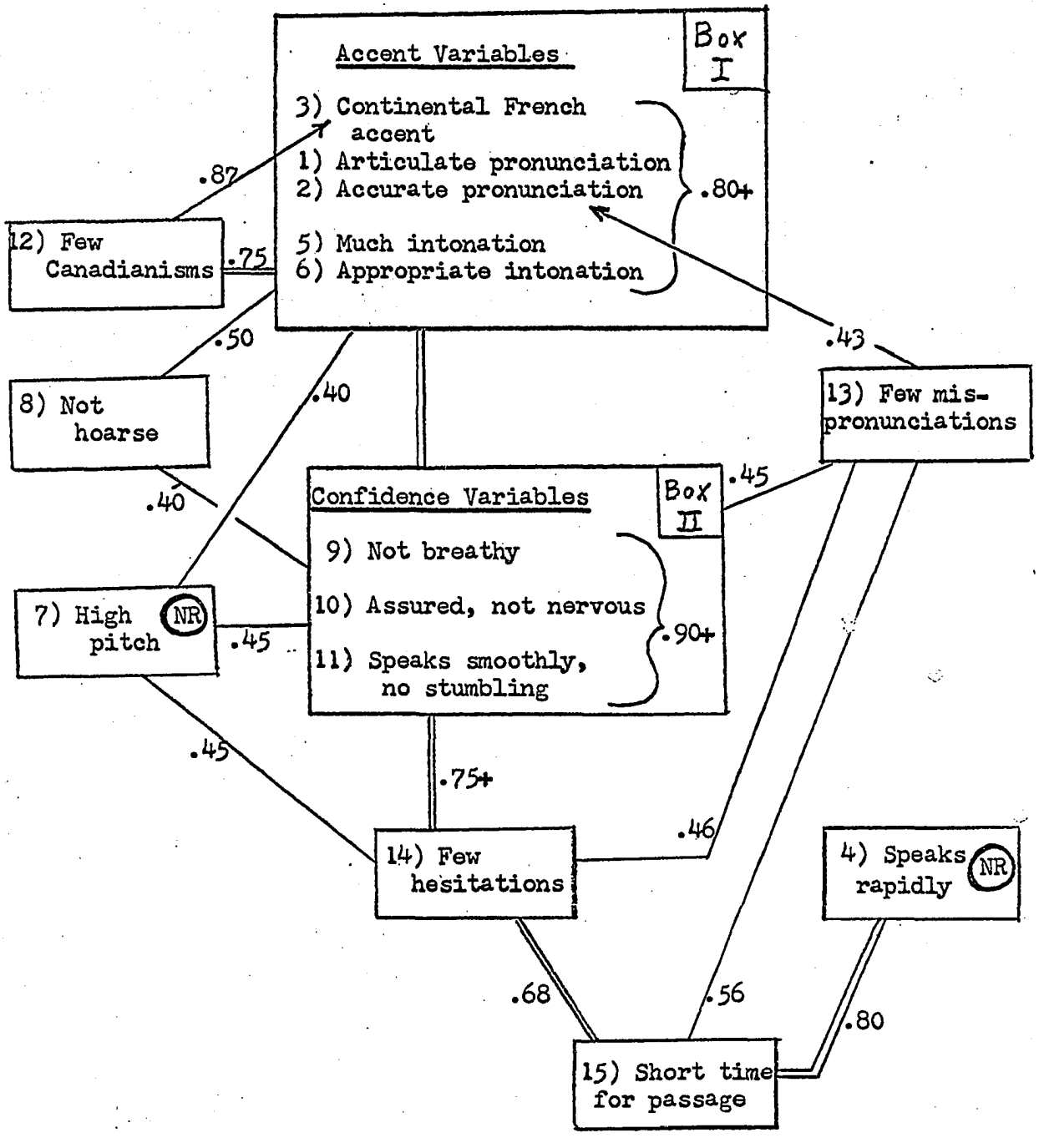
Although one might expect ratings of accuracy of pronunciation (#2) to give about the same information as a tally of mispronunciations (#13), Figure 13 and Table 10 show that they are only slightly correlated. This is probably because deviation from what is considered "accurate pronunciation" is a matter of degree, and a speaker can deviate enough from that standard to give an impression of unorthodoxy but seldom be extreme enough to have one of his verbalizations scored as a "mispronunciation." The same is probably true of "Canadianisms" (#12) as compared to accent (#3).

Table 10. Matrix of Inter-correlations Among Father Speakers' Scores on 15 Linguistic Variables

	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1) Articulate pronunciation	.90	.78	-.16	.80	.89	.29	.52	.74	.79	.72	.62	.27	.56	.24
2) Accurate pronunciation		.87	-.05	.81	.93	.38	.59	.84	.80	.80	.75	.43	.49	.33
3) Continental French accent			-.13	.78	.87	.48	.48	.71	.66	.67	.87	.17	.36	.10
4) Rapid speech				-.10	-.10	.09	.06	.14	.07	.08	-.08	.19	.33	.80
5) Much intonation					.90	.46	.36	.73	.78	.72	.74	.04	.46	.18
6) Appropriate intonation						.40	.48	.84	.84	.81	.44	.26	.50	.24
7) High pitch							.17	.44	.43	.50	.29	.09	.44	.12
8) Not hoarse								.42	.38	.46	.48	.29	.07	.25
9) Not breathy									.94	.91	.63	.40	.74	.54
10) Assured, not nervous										.95	.55	.37	.80	.48
11) Smooth, fluent speech											.57	.44	.76	.50
12) Few Canadianisms												.00	.17	.07
13) Few mis-pronunciations													.46	.56
14) Few hesitations														.68
15) Short time for passage														—

Note.- The variable names in this table have been changed to their approximate English equivalents.

Figure 13. Major Groupings of the 15 Speech Variables: Father Speakers



Explanation of Figure 13:

1. An arrow going inside a box and pointing to one variable (like the one from variable #13 to variable #2) indicates that the correlation indicated is only with that variable to which the arrow points.

2. The correlation coefficients within boxes indicate roughly the correlations that exist among variables in that box.

3. A double line between boxes is used to indicate strong relationships.

4. Those variables with (NR) in the box are completely unrelated to speaker SES level.

5. To conserve space, only the positive adjective for each paired dimension is listed in this figure.

Another factor may be that the linguistic judges, two being from Canada, one from France, and one from Algeria, don't agree with respect to what constitutes a "mispronunciation" (#13) or even a "Canadianism" (#12). That such is the case is shown in Table 9a which gives the reliabilities for each speech variable. The reliabilities for Canadianisms and mispronunciations in the ratings given French Canadian speakers (right hand part of the table) are much lower than those of the other speech variables, and they are the only variables on which the inter-rater agreement doesn't exceed chance level. Notice however, that in the left hand part of Table 9a, which gives reliabilities for the ratings given to Continentals as compared to Canadians, the inter-rater reliability for Canadianisms is high, suggesting that raters can agree in differentiating Continentals from Canadians on this variable, although they don't agree as to relative ratings within a group of Canadians. Because of the clarity of the difference between Continentals and Canadians, the tally of Canadianisms correlates very highly ($r = .87$) with ratings of French Canadian accent (#3). The tally of mispronunciations, on the other hand, is hard for raters to agree upon, even when comparing Continentals to Canadians.

Figure 13 and Table 10 show clearly that the length of time a speaker takes to recite a passage is made up of two only very slightly related components, number of hesitations (#14) and subjectively-rated speaking speed (#4).

The largest clustering among the speech variables is that of Box I, Figure 13, which includes accuracy and articulateness of pronunciation (#2 and #1), amount and appropriateness of intonation (#5 and #6), and accent

(Continental French vs. French Canadian, #3). These variables are the ones that fit the AB - CD occupational SES cleavage best. The ordering of speakers is perfectly predictable from the AB - CD split on two of these variables, accuracy of pronunciation and accent, without a correction for educational level discrepancies, as shown in Figure 14, Contingency Table A. Also, the AB - CD split accounts for 85% and 95% of the variance in these variables. (If the linguistic judges considered "accurate pronunciation" to be that which fits the "standard form" used in France, then #2, accuracy

Figure 14. Contingency Tables for Speech Variables with a Perfect AB - CD Split and for Those with a Perfect A - B Split

Category of Average Received Ratings

SES Category	Highest 9	Lowest 11
A+B	9	0
C+D	0	11

Contingency Table A
AB - CD Comparison

(exact test, probability $< .005$)

For speech variables:

#2 accuracy of pronunciation
#3 accent

Category of Average Received Ratings

SES Category	Highest 3	Lowest 6
A	3	0
B	0	6

Contingency Table B
A - B Comparison

(exact test, probability $< .05$)

For speech variables:

#2 accuracy of pronunciation

of pronunciation may only be another way of rating regional accent, #3.) This amazingly strong predictive relationship suggests that the speech characteristic that is reflected in these ratings is almost entirely determined by the SES level of a speaker with education playing a role only because of its rough correspondence to SES. In addition to the AB - CD split, accuracy of pronunciation also clearly differentiates aristocrats from category B speakers (Contingency Table B of Figure 14), which indicates that a linguistic difference exists between category B speakers and aristocrats, although the two groups are generally not differentiated in personality ratings.

Articulateness of pronunciation and appropriateness of intonation have only one exception for each predicted category, thus fitting Contingency Table A of Figure 15; and amount of intonation has only two exceptions for each, fitting Contingency Table B of Figure 15. It is not surprising that the two intonation variables and articulateness and accuracy of pronunciation cluster closely with accent. Note that almost all the linguistic variables on which the upper class Canadians are rated higher than the lower class also differentiate upper class Canadians from the Continental French, which suggests that perhaps all of these linguistic variables contribute to what are called differences in "accent" between French Canadians and Continental French. The upper class French Canadians fall between lower class French Canadians and the Continental French speakers in their received ratings on most speech variables. This might be an indication that upper class French Canadians are imitating the French, although it may just be that the extremes of any dialect are only found in the lower classes, and thus the upper

Figure 15. Other Contingency Tables for Speech Variables

Category of Average Received Ratings

SES Category	Highest 9	Lowest 11
A+B	8	1
C+D	1	10

Contingency Table A
AB - CD Comparison

(exact test, probability $<.005$)

For speech variables:

#1 articulateness of pronunciation
#6 appropriateness of intonation

Category of Average Received Ratings

SES Category	Highest 9	Lowest 11
A+B	7	2
C+D	2	9

Contingency Table B
AB - CD Comparison

(exact test, probability $<.05$)

For speech variables:

#5 amount of intonation
#9 breathiness
#10 nervousness
#11 fluency
#14 hesitations (tally)

classes of any two regions would tend to be more alike. Gendron (1966) maintains that upper class French Canadians do try to imitate Continental speech, but adds that they rarely succeed.

Linguists, of course, have examined these speech variations from their perspective. For example, Lote (1919) found that intonations were greater in the reciting of alexandrines than in ordinary speech and concluded that intonation was the result of the speakers being more expressive. Similarly, Boudreault (1967) has found that the French use much more intonation than

do French Canadians and he suggests that this greater expressivity is a much more sophisticated kind of communication. In Table 9, the upper class French Canadians are rated between French and lower class French Canadians on this variable although they are much closer to the lower class French Canadians. Table 9 also shows the French to have higher pitched voices (#7) than Canadians, but this is probably due to the intonation, which is much greater for the French than for Canadians, since Boudreault has found that greater intonation makes the voice sound higher.

Gendron (1960) argues that French Canadian speech is more "monotonous" than Continental French speech and that the rhythm of Canadian speech is heavier and the sentences of lower class Canadians are often indistinct and blurred. He maintains that this is due mostly to laziness, and that it seems to disappear in the speech of educated French Canadians. In a later report (Gendron, 1966) he asserts that Canadians tend to put less energy into articulation and more into breathing. This notion is supported by the results of Table 9 which show the Continental French to be much higher on articulation and lower on breathiness than upper class French Canadians, with the upper class French Canadians being in turn higher than the lower class French Canadians on articulation and lower on breathiness.

In addition to these differences, Gendron (1966) finds that many phonemes are pronounced differently by French Canadians and French Continentals. This is also supported by the results given in Table 9, with the French being higher than upper class French Canadians on accuracy of pronunciation (#2), who are in turn higher than lower class French Canadians.

(Note here that the Continentals are not only different from French Canadians in their pronunciation, but the linguistic judges consider the Continental pronunciation to be more "accurate.") One of the most prominent of the pronunciation differences, according to Gendron, is the open (a) of popular Canadian speech which was used in France at the time of the Canadian emmigration but has long since disappeared in European speech. Upper class French Canadians have attempted to adopt the French (a), but they are not completely successful. Gendron (1966) has photographed the actual articulatory movements of French Canadians as compared with Continentals, and he finds that upper class French Canadians replace the open (a) of the lower class with another (a) that is more similar to the French one, but still slightly different. Also, in the pronunciation of other phonemes, the produced sound of upper class French Canadians seems similar to that of the Continental French, but the articulatory movements are still Canadian. The evidence is compelling that upper class French Canadians do imitate Continental French speech, suggesting a strong identification of French Canadians with France.

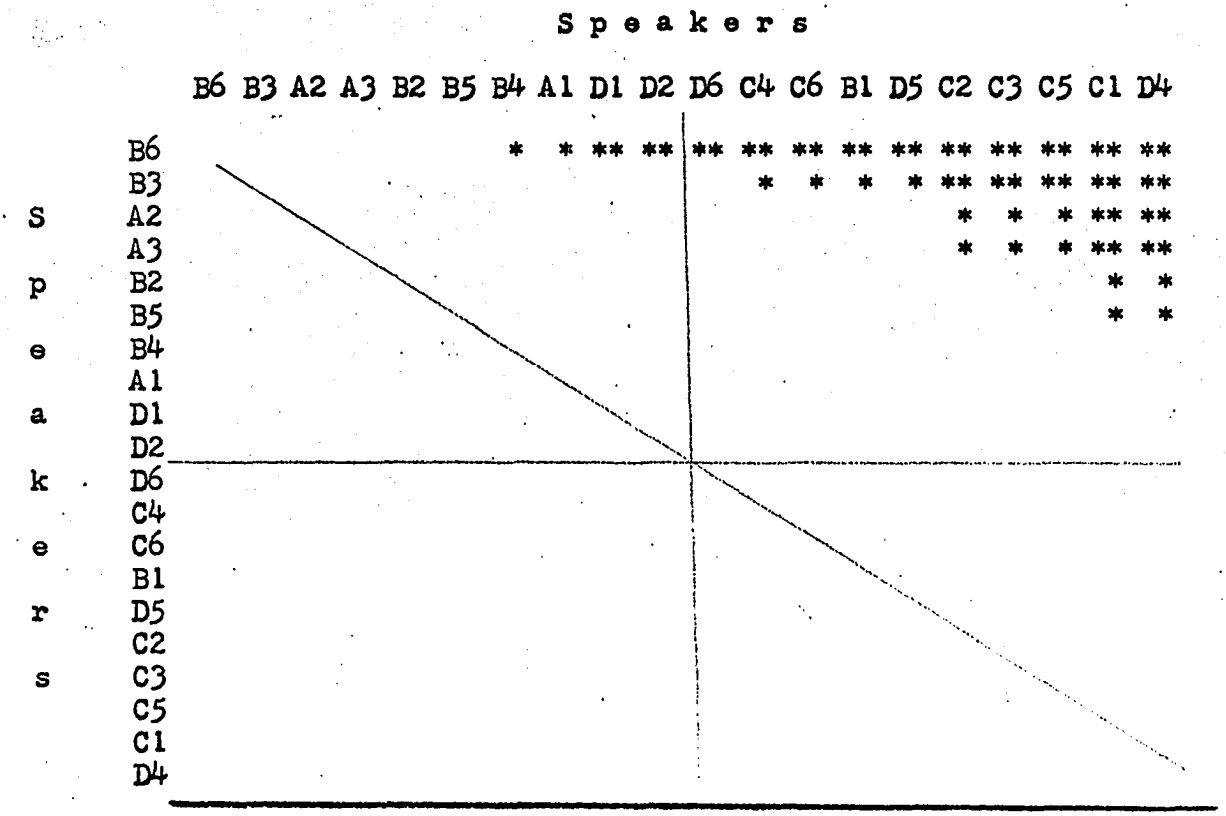
Since the differences between French Canadian speech and Continental French speech center around the variables listed in Box I (Figure 13), these will be broadly labelled "accent variables." The speech variables of Box II seem to be expressive of speaker confidence and will be labelled "confidence variables." These variables would probably be good differentiators of SES in any culture, since those of higher SES in any region are likely to be more confident. It is interesting that the Continental French

are also rated higher than upper class French Canadians on these variables that are expressive of confidence (although the differences are not nearly as large as those for the accent variables.) A profitable study could be carried out using French Continentals (as well as French Canadians) from each SES level in order to determine which differences in speech are due to national or regional dialect and which are due to SES differences. It may be that lower class French Continentals are like lower class French Canadians in that they are also breathy and monotonic in their speech, use less energy in articulation, etc.; and it may be that the only purely regional differences are those that center around pronunciation of phonemes. However, it is interesting that even on variables such as the confidence ones that would be expected to primarily be SES level differences, the Continentals are rated higher even than French Canadians of higher SES levels than their own.

The variables of Box II are highly predictable from the AB - CD occupational SES classification and they all fit the pattern of Contingency Table B, Figure 15. Just as was the case in personality ratings, exceptions to the SES prediction on the linguistic variables are usually due to the speakers D1 and B1 (and sometimes D2), whose educational levels differ from those of the rest of their respective SES groups.

Although the ordering of speakers on the speech variables of Boxes I and II of Figure 13 align very well with the AB - CD occupational SES division (in two cases even without educational level correction), the differences between speakers are almost completely continuous (see Figure 16)

Figure 16. Matrix of Chance Probabilities of Differences Between Each Father Speaker and Every Other Father Speaker on Average Received Accuracy of Intonation (#6) Ratings



Note.- This figure is read in the same way as Figure 4. For a detailed explanation refer to Figures 4 and 5 and the accompanying text (pp. 24-27).

rather than displaying the dichotomous cleavage that was found between these two groups in personality ratings received (Figure 4). This suggests that either there are some very important speech characteristics left out of the 15 speech variables of this study, which differentiate speakers into two discrete groups, or else the dichotomization takes place in the personality inference processes of the individual raters. That is, the dichotomous ratings of personality given to speakers may be due to a tendency for raters to dichotomize rather than being due to any sharp discontinuity between the AB group and the CD group in their speech patterns. Perhaps the processes of assimilation and contrast (Hovland, et al., 1957) wherein the person sees ideas similar to his own as being more similar to his than they really are, and ideas that are different from his own as being more different than they really are, also operate in the perception of people. It looks, then, as though speech patterns do not fit into two dichotomous groups, but are continuous from the "worst" speakers of Canadian French to the "best". However, the social reality of such a dichotomy in people's perceptions of one another is attested by the dichotomous classification which is imposed upon father speakers by the raters. The fact that raters impose a dichotomy on the personality-rating level even though it doesn't exist on the linguistic level demonstrates even more conclusively the importance of what Falardeau calls the "most universally felt social cleavage."

Comparison by education. Up to this point, the analyses of differences among French Canadians in speech and in personality ratings have focused on SES differences, although it has been necessary to correct

the SES categorization for educational level descrepancies in order to account for received ratings. When the ratings of speakers on the speech variables are analyzed according to speakers' educational levels (Table 11), the split between those who have completed high school and those who haven't is the major one. This is not too surprising since this split corresponds closely to the AB - CD social class split. All As and Bs have at least finished high school (and most have at least some university), and all the Cs and Ds except four (D1, D2, C1, and C3) have had less than 11 years of education.[8] More of the father speakers fit into the two upper categories of education than fit into the two upper SES categories.

There are some differences between the SES analysis and the educational analysis. SES seems to be a slightly better predictor of accent variables (Box I of Figure 13), particularly those that have to do with accuracy and articulateness. On pronunciation accuracy (#2) and accent (#3), SES accounts for almost 25% more variance than education (93% and 95% as compared to 69% and 73%). SES and education are just about equally related to amount of intonation (#5).

The categorization by education differs from that by SES also in that the accent variables (Box I) and the confidence variables (Box II) are distinguishable on a secondary split (Comparison 2, Table 11), as well as on the gross upper - lower split. All of these accent and confidence variables (except breathiness, #9) differentiate those with some university education from all other high school graduates. The predictive usefulness

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[8] In some schools, high school graduation is 11 years and in others it is 12.

Table 11. Linguistic Ratings of Father Speakers
Analyzed According to Speakers' Educational Levels

	Groupings According to Speakers' Educational Levels												
	total	Comparison 1				Comparison 2				Comparison 3			
A. Linguistic Ratings.	%v	Un&HS	HJ&El	%v	X2	Un	HS	%v	X2	JH	El	%v	X2
Prononciation:													
1) Articulée, marquée	.66	3.4	***5.0	.51	*	3.0	**4.1	.15		4.8	5.2	.00	
2) Juste	.69	4.5	***6.1	.55	*	4.2	***5.2	.14		6.1	6.2	.00	
Accent:													
3) Continental	.73	6.0	***6.7	.63	*	5.9	* 6.2	.09		6.7	6.8	.01	
Vitesse du monologue:													
4) Rapide	.18	3.7	**4.4	.05		3.8	3.5	.01		3.4	5.1	.12	
Intonation:													
5) Beaucoup	.41	4.7	***5.8	.14	*	4.0	***5.8	.27	***	6.0	5.6	.00	
6) Juste	.62	5.0	***6.4	.38		4.4	***5.8	.24		6.4	6.4	.00	
Particularités de la voix:													
7) Aiguë	.10	4.6	5.1	.05		4.5	4.9	.02		5.5	4.8	.03	
8) Douce (Raque)	.70	3.7	***4.9	.66	*	3.5	4.0	.04		4.9	4.9	.00	
9) Peu haletante	.53	3.1	***4.4	.45	*	2.9	3.5	.06		4.3	4.4	.02	
Particularités de l'individu:													
10) Assuré et détendu	.47	3.5	***5.2	.36		3.0	***4.2	.11		5.2	5.2	.00	
11) Mots coulent sans accrocs	.59	3.7	***6.0	.50	*	3.2	**4.4	.08		6.5	5.7	.01	
B. Linguistic Tallies.													
12) Canadianisms	.32	8.4	8.8	.00		7.8	9.5	.26		9.7	8.2	.06	
13) Mispronunciations	.67	0.6	* 1.3	.61		0.6	0.7	.00		1.0	1.6	.06	
14) Hesitations	.39	0.5	***1.8	.37	*	0.5	0.5	.00		1.3	2.1	.02	
15) Time for passage	.44	142	***186	.38	***	143	141	.00		170	***199	.06	

Explanation of Table 11:

1. This table is read in the same way as Tables 4 and 9. See Table 4 for a detailed explanation of symbols.

2. Key for comparison labels:
   Un = All speakers with any education beyond high school.
   HS = All speakers who have completed high school only.
   JH = Speakers who have gone to the 9th grade or further, but haven't completed high school.
   El = Speakers with 8 years of education or less.

of the split is much less than that of the gross split of "high school or more" vs. "less than grade 11" (Comparison 1, Table 11). The accent variables (1, 2, 3, 5, and 6) are more related to this secondary split (university vs. high school) than are the confidence speech variables (9, 10, and 11). Two factors could be operating: (a) a university education might make one's accent more continental, or (b) it might just be an artifact of the close link between SES and accent, and the fact that more upper class people attend university. One way of checking this is by examining how D1 and D2, the two speakers of low SES level with some university education, are rated on the accent speech variables. (D1 is a better example than D2, since D2's father came from an upper SES level, as shown in Table 1.) Table 14 gives the ordering of each speaker on each of the linguistic variables. In general, D1 and D2 are rated more toward the end of the scale corresponding to Continental French accent than are other members of the lower SES categories (C and D) but they are also rated lower than other speakers who have some university education (the three aristocrats plus B3, B5, and B6) suggesting that both university training and SES determine accent.

This secondary split by education also shows up on the personality ratings (see Table 1 in Appendix B). The university men are rated more intelligent, actif, juste, sincère, beau, sûr de soi, fiable, sociable, ambitieux, religieux, poli, content and higher on occupational level ratings than those who are only high school graduates. In general these are the adjectives that correspond to the competence factor. The comparable split by speakers' SES (aristocrats vs. category B) had only three adjectives

that discriminated between the two groups: actif and sincère (on which the aristocrats were higher) and religieux (on which the aristocrats were lower).

The third educational level comparison, that of speakers with 9-11 years of education compared to those with less than 9, is differentiated in personality ratings, but generally not in ratings of speech. Those with 9-11 years of education differ significantly from those of less than 9 years of education (Comparison 3, Table 1 of Appendix B) on intelligent, actif, comique, courageux, fort, poli and content, with the 9-11's being higher on all of them, even though the only speech difference on this comparison (Comparison 3, Table 11) is total time for the passage. It seems that either the raters are utilizing cues beyond the speech dimensions analyzed here, or else the large number of raters of personality has made it statistically easier to detect differences in personality ratings than it is to detect differences on the speech dimensions.

The educational categorization predicts total speaking time (#15) in this study much better than does SES (accounting for over twice the variance), probably because education is related to the speed (#4) element of total time (which SES isn't) as well as to the hesitations (#14) element.

The hoarseness of speakers is very related to education, accounting for 70% of the variance in ratings. (Only half this much variance was accounted for by SES.) This particular result is particularly important theoretically. Rousey and Moriarty (1965) give some evidence that "persistent hoarseness.....tends to occur in individuals manifesting socially

distorted sexual identification and functioning." According to them, hoarseness in males is a sign of striving to be overly masculine. Since we have found speakers of low education to be more hoarse, it suggests that masculinity might be an important virtue among those males who drop out of school early, while education may seem to them to be a somewhat "unmanly" activity, particularly in their earlier years. Notice that there is no significant difference here between the upper class French Canadians and the Continental French (also of upper class), suggesting further that the hoarseness dimension is expressive of major value differences that exist between educated and uneducated groups within a culture. The Continental French do not differ from upper class French Canadians on hoarseness, although upper class French Canadians differ from lower class French Canadians suggesting that those from different cultures who have the same educational level share the values expressed here. It is hypothesized as a general cross-cultural principle that uneducated members of a society will have more hoarseness in their speech than will the educated.

It is important to find the age at which these presumed value differences are first expressed and to identify the relative importance of parents and peer group in determining these value orientations as well as in determining speech patterns. If value orientations and motivations manifest themselves in the person's speech, as Rousey and Moriarty propose, then the age at which hoarseness differences manifest themselves in children should be the age at which the corresponding value systems begin to be adopted.

Frender's study. In an undergraduate honors thesis carried out in conjunction with this thesis, Frender (1968) has begun to search for answers to these questions. He began with Bernstein's (1962) notion that the impoverished linguistic background of lower class children, and the way they speak in contrast to the way middle class teachers speak, put them at a gross disadvantage in school. Frender was interested in determining whether, among children of lower class, differences in school performance could be attributed to differences in speech patterns and language ability. After careful selection and control, he worked with a sample of 32 third grade French Canadian boys. The successful group consisted of 16 boys with grade averages of B or higher, and the unsuccessful group consisted of 16 boys with grade averages of C or lower. The two groups were selected to be equal in non-verbal I.Q. (Multimental, non-language) and in Blishen SES. The boys were chosen from schools in very low socioeconomic areas of Greater Montreal and all of them came from homes of Blishen levels 5, 6, or 7.

Frender found that even though the two groups were the same with respect to non-verbal I.Q. their verbal I.Q. scores differed significantly (Table 12), supporting the contention that their handicap is primarily a language difficulty rather than one of intellectual capacity. Frender, using the same speech rating categories as used in this study, found that the successful third-graders differed significantly from the unsuccessful ones on intonation variables, but not on accent, articulation, or accuracy of pronunciation. These same variables, it will be recalled (see Table 10

Table 12. Verbal and Non-verbal I.Q., and Speech Performance of Successful and Unsuccessful Low SES French Canadian 3rd Grade Boys (from Frender, 1968)

	Group With Grade Average of "B" or Above	Group With Grade Average of "C" or Below	Significance Level of the Difference
Non-verbal I.Q. (Multimental)	109	107	n.s.
Verbal I.Q. Raw Score (Pintner-Durost)	80	69	.001
Speech Performance Variables.			
Pronunciation:			
1) Articulate	5.9	5.9	n.s.
2) Accurate	5.5	5.6	n.s.
Accent:			
3) Continental	6.0	6.1	n.s.
Speed of speech:			
4) Rapid	3.0	4.3	.01
Intonation:			
5) Much	2.2	5.1	.01
6) Appropriate	3.2	5.5	.01
Characteristics of voice:			
7) High pitch	4.0	5.5	.05
8) Not hoarse	4.2	5.2	n.s.
Characteristics of speaker expressed in voice:			
10) Confident (opposite is nervous)	2.5	4.2	.05
11) Fluent	4.0	4.3	n.s.

Note.- The figures given for speech variables are group medians, while those for the two I.Q. tests are means. The smaller the median on the speech performance variables, the more the positive trait listed was attributed to that group. The medians were tested for significance with the Mann-Whitney U Test (Ferguson, 1966, pp. 358-362.) Those differences that do not reach the required level of significance (.05) are labelled "n.s."

and Figure 13), were found to be very highly correlated with each other when applied to the voices of adult males, while Frender found that his successful and unsuccessful students differ on intonation only. It is very likely that accent, pronunciation and articulation are determined very much by the way a child learns language (and from whom he learns it), whereas intonation, which Lote (1919) regards as expressivity, is determined much more by the child's own personality and values. Since all of the children in Frender's study came from the same SES level, they were alike on those speech variables (accent, pronunciation, etc.) that depend most upon their milieu of speech acquisition. Their differences of motivation showed up in the expressivity speech variables.[9] It would be interesting now to study brothers who differ in school performance to see if they would fit the same pattern. This would be an important step toward finding what it is that makes a person upwardly mobile.

Members of the successful group were also found to be more confident (as opposed to hesitant and nervous), to speak faster and to speak with higher-pitched voices. Confidence is clearly expressive of personality, but pitch is thought of as being a genetic or physiological characteristic. But why should a high success-in-school group have consistently higher-pitched voices than a low success-in-school group? One possible answer

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[9] It is still not clear whether a boy does better in school because he intonates more and is more expressive, or whether he dares to be more expressive and is more confident in his speech because he is successful in school. At least Frender has ruled out to some extent the possibility that both success and intonation are caused by greater intelligence, since the two groups were equal on non-verbal I.Q.

is Boudrealt's finding that greater intonation (expressivity) makes the voice sound higher-pitched. Another possibility is that the low success group is unconsciously striving to be overly-masculine, but this would also mean that the low group should be hoarser. Actually the low group is somewhat hoarser and the difference between the two group medians is quite sizable. (Frender used only one linguistic rater, which made it necessary to use a less powerful statistic to test the difference, but even at that, the U test result is very close to that required for the .05 level.) Since there is probably much more variance in voice pitch among adult males than among third grade boys, and since hoarseness would probably become more extreme after years of "misuse" of the voice, it is very possible that striving for masculinity would express itself more as lowered pitch in the early years, and as hoarseness in later years. Rousey and Moriarty (1965) point out that often "physiological" hoarseness is actually due to vocal nodules (growths on the vocal cords) which laryngologists consider to be the result of vocal misuse. It may be that a boy who strives to be overly masculine lowers his voice more in earlier years, but then lets his voice return to normal later in life, but the hoarseness remains, thus making pitch more important as an index in earlier years and hoarseness in later years.

It could be quite confidently predicted that the children in the high success-in-school group will go to school longer and end up in higher SES levels than will the low school-success group. In sociological terms it could be said that although the high success students of Frender's study come from a lower class "membership group", their "reference group"

(which is probably their future "membership group") is at the middle or upper social class levels.

The first step in their upward mobility is that of adopting some of the values of the upper group (like the value of educational success). These values are expressed in such speech characteristics as greater intonation. Their greater agreement (as compared to other students who lack this value orientation) with the teacher and the educational system in general, both in values and in mode of expression, make for success in school, as does their heightened motivation for schoolwork, which is in turn reflected in more confident and fluent speech, i.e., a lack of hesitation and nervousness. If a young man of lower class is successful enough in school to finally attend university, it is very likely that he will have much contact with upper class French Canadian accent, pronunciation, and articulation, and will strive to adopt it. Just how successful the upward mobiles are at changing their accent, pronunciation, and articulation is an important problem for research, but the hypothesized events of the foregoing passage would explain why these pronunciation and accent variables are strongly related to the intonation ones and also to high SES, education and success in adult males, while successful young boys of low SES background have only intonation, pitch and confidence. Intonation, pitch and confidence are the first steps in upward mobility because they are easier to change, whereas modifications of accent, pronunciation, and articulation may take years (and perhaps they can't be completely changed).

Frender also compared the two groups on need for achievement by means

of McClelland's (1958) ring-toss test and found the successful-in-school group to be higher in need for achievement than the unsuccessful group, which points out that the upper class values which express themselves in the speech of the successful group of third grade students are probably closely linked to, if not the same as, the value system which McClelland calls "need for achievement." McClelland calls it "need" for achievement rather than "value of achievement," suggesting that it impels the person to action. Just as hunger is the motivating force for food-seeking behavior, McClelland posits that this need is the very powerful motivating force for achievement behavior.

From McClelland's work it is not clear what motivates the other kind of behavior, the kind that typifies the third grade boys who think the "grade A kids" are sissies and "teacher's pets", the boys who quit school after three or four years and take whatever work they can. The finding of deeper-pitched voices among the unsuccessful-in-school group suggests that masculinity is an important value for them. A "need for masculinity" should motivate them to do some rather grown up and masculine things, such as dropping out of school (where they don't do well in any case) and getting a job at an early age. Rousey and Moriarty (1965) have further suggested that this subconscious lowering of the voice "may result from premature attempts at expressions of sexuality," suggesting that there may be some truth in the common idea that promiscuity is earlier among a self-selected subgroup of the lower classes.

It has been established that speech differences parallel motivational

or value differences, but the question remains as to which antecedents bring about both the value differences and the speech differences. Winterbottom (1953) has found that children with a high need for achievement were trained by their mothers to be independent at an early age, and perhaps similar differences in child training are the basis of speech differences. Peer group influences also need to be explored.

SES levels of speakers' fathers. In the preceeding paragraphs evidence has been given that upwardly mobile French Canadian males undergo a change in speech patterns which parallels their change in SES level. Table 13 shows that there is also evidence that the upwardly mobile person partially retains some of his former speech characteristics. Between 25% and 30% of the variance (comparable to correlation coefficients of .50 to .55) in the accent variables (numbers 1, 2, 3, 5 and 6) and even more variance in pitch and hoarseness are accounted for when the speakers are categorized according to their fathers' occupational SES levels. Lest someone argue that these results are due to the correspondence between the SES levels of the speakers and their fathers, it must be emphasized that the SES levels of the adult male speakers of this study and that of their fathers correlate only .42 (about 16% common variance), the relationship being much weaker than the relationship between their speech and their fathers' SES levels. These results suggest that accent and the pitch and hoarseness characteristics are at least partly passed on from father to son.

Although it has now been suggested that the speech of adult male French Canadians is determined to some extent by the SES level of their fathers,

Table 13. Linguistic Ratings of Father Speakers Analyzed According to Their Fathers' Occupational SES Levels

	Groupings According to Speakers' Fathers' Occupational SES Levels								
	total	B vs. CD				C vs. D			
A. Linguistic Ratings.	%v	B	CD	%v	X2	C	D	%v	X2
Prononciation:									
1) Articulée, marquée	.26	2.9	***4.2	.25	*	4.3	4.6	.01	
2) Juste	.27	3.8	***5.5	.26	*	4.4	6.0	.01	
Accent:									
3) Continental	.24	5.8	***6.4	.24		6.4	6.5	.00	
Vitesse du monologue:									
4) Rapide	.00	3.8	3.9	.00		4.0	3.9	.00	
Intonation:									
5) Beaucoup	.29	3.7	***5.4	.24		5.6	**4.7r	.05	
6) Juste	.24	4.4	***5.7	.24		5.8	5.7	.00	
Particularités de la voix:									
7) Aiguë	.36	4.4	4.9	.04		5.1	***3.8r	.32	
8) Douce (Rauque)	.31	3.7	4.3	.08		4.1	**5.1	.23	
9) Peu haletante	.04	3.1	3.7	.04		3.6	3.9	.00	
Particularités de l'individu:									
10) Assuré et détendu	.04	3.5	* 4.3	.04		4.2	4.4	.00	
11) Mots coulent sans accrocs	.01	4.2	4.6	.01		4.6	4.7	.00	
B. Linguistic Tallies.									
12) Canadianisms	.30	7.2	* 8.9	.30		8.8	9.3	.00	
13) Mispronunciations	.00	0.9	0.9	.00		0.8	1.2	.00	
14) Hesitations	.00	0.9	0.9	.00		1.0	0.7	.00	
15) Time for passage	.03	150	***160	.01		157	***169	.02	

Note.- This table is read in the same way as Tables 4, 9, and 11. See Table 4 for a detailed explanation of symbols.

it must be remembered that their speech is even more strongly related to their own SES level, especially on the accent variables on which between 70% and 95% of the variance is accounted for by the speakers' SES levels. On the basis of this evidence, it could be concluded that a person's accent (including articulation, pronunciation and intonation) is much more a function of the SES level he himself attains, with the SES level he was born into maintaining only a slight influence.

It is particularly interesting that the major difference in the accent that a father passes on to his son is between the speakers whose fathers were of SES category B as opposed to those whose fathers were of categories C and D. No difference shows up between those whose fathers were category C as compared to those whose fathers were of category D in the accent they pass on to their sons. It will be remembered that the major difference in accent according to speakers' own SES is also at the AB - CD split. On the other hand, pitch and hoarseness seem to be speech variables on which speakers whose fathers were of SES category D differ from speakers whose fathers were of category C. The speakers whose fathers are from category D are hoarser but have higher-pitched voices than those whose fathers are from category C. If it were not for this reversal on pitch, it would be a clear case of masculine striving being passed on by category D fathers. As it turns out, it is very difficult to explain.

When speakers' own SES levels are considered, this same reversal on pitch is found, with category D speakers having higher-pitched voices and also more intonation (#5), less nervous (#10) and more fluent (#11) speech

than category C speakers (Table 9). In the next section we will discuss the relationship between speech patterns and personality judgments and it will be demonstrated that these C - D reversals according to speakers' own SES categories are due mainly to the overeducated speakers D1 and D2, and it may be that the complication in pitch inheritance also centers around these speakers. Perhaps in future work, many of the answers to the question of what causes speech differences will be found in detailed study of people like D1 and D2 who are exceptions to the usual rule of correspondence between education and SES.

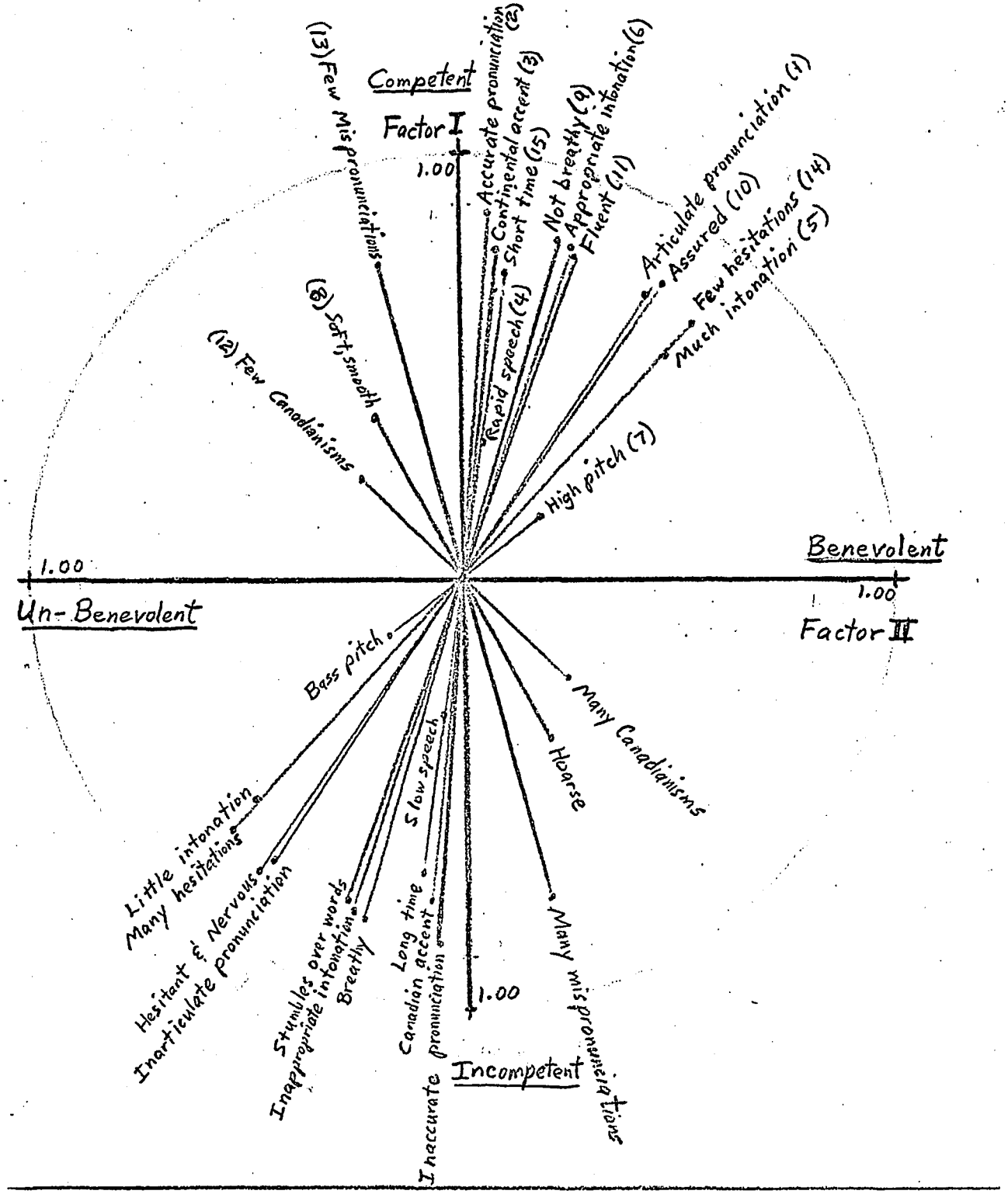
Speech Patterns and Personality.

Figure 17 shows graphically how speakers' received ratings on the speech variables are correlated with their received ratings on benevolence and competence, the two factors of personality judgment. It is not surprising that most of the 15 speech variables are highly correlated with the competence dimension, since they were chosen to be important differentiators of high and low SES. It is also not surprising that none of them correspond closely to the benevolence factor, since, in the analysis of the 15 speech variables, it was found that most of the variables correlate quite highly with one another, and those few that were somewhat independent of the others didn't form a clear second factor.

The variables in general that are highly related to competence are those that involve accuracy of speech (pronunciation and intonation), Continental-style accent, fluency, and total reading time. Four variables are moderately related to benevolence. In general the speakers that are judged to be benevolent are more expressive (intonate more, #5), have fewer hesitations (#14), sound less nervous (#10), and pronounce more articulately (#1).

Rate of speaking (#4), and pitch (#7), tally of Canadianisms (#12) and hoarseness (#8) have much variance which is not common with the two factors (that is, they have much unique variance), suggesting that these speech dimensions are either not very related to the personality judgments made or else they are related in a complex way. (Notice how short the vectors for these speech variables are in Figure 17.)

Figure 17. Graph of the Correlations Between Speech Variables and the Two Factors of Personality Judgement for Father Speakers



Most of the speech differences as well as differences in received rating on the personality variables occur at the AB - CD split. Some speech variables were found (Table 9) to differentiate between the two lower SES categories, category C and category D, but the predicted direction of the difference between these two groups on these variables was reversed. That is, category D, the lowest SES group was actually higher than category C on amount of intonation (#5), they were not as hesitant and nervous (#10), they were more fluent (#11), and their voices were judged to be higher in pitch (#7). This same reversal was also found in those few personality adjectives (Table 4) that differed for these groups. The Ds were rated more sûr de soi than Cs and more fiable, although they were rated less fort. These differences on both the speech rating level and the personality rating level might be due to D1 and D2, the "overeducated" category D speakers, since education is quite highly and positively related to all of the speech variables except pitch (see Table 11), and to the personality adjectives sûr de soi, fiable, and fort (see Table 1 of Appendix B). (Note that fort goes against the present argument since, though it corresponds positively to education, the Ds are not higher on it than are the Cs.)

The ordering of speakers on each speech variable (Table 14) supports the idea that D1 and D2 account for these differences. D1 and D2 are rated as less hesitant and nervous (#10), more fluent (#11), and their voices are higher-pitched (#7) than all of the Cs. Also they have more intonation (#5) than all but one of the Cs. If D1 and D2 were dropped

Table 14. Ordering of Speakers on Each of the 15 Speech Variables

	Speaker Order																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
1) Articulate pronunciation	B6	A3	A2	A1	B5	B3	B2	B4	C1	D1	C4	C6	B1	C5	D2	D5	C3	D6	C2	D4	Inarticulate pronunciation
2) Accurate pronunciation	A3	A1	A2	B6	B2	B3	B5	B4	B1	D1	C6	D2	C4	C3	C2	D5	C1	D6	C5	D4	Inaccurate pronunciation
3) Continental French accent	B6	A2	A3	B4	B3	B5	B2	A1	B1	C6	C4	D2	D1	C3	C2	C1	D5	D6	D4	C5	Canadian French accent
4) Rapid speech	B1	C2	A2	C3	D2	D1	C5	B4	D6	A3	B2	B6	A1	B5	D5	C6	B3	C1	C4	D4	Slow speech
5) Much intonation	B6	A3	D6	B3	A2	D1	B5	A1	B2	B4	C4	D2	B1	C1	C2	C6	C3	D5	C5	D4	Little intonation
6) Appropriate intonation	B6	B3	A2	A3	B2	B5	B4	A1	D1	D2	B6	C4	C6	B1	D5	C2	C3	C5	C1	D4	Inappropriate intonation
7) High pitch	A1	D6	D2	B4	D1	A2	D5	C1	C3	B1	B6	C4	B3	B5	D4	C2	C5	B2	A3	C6	Bass pitch
8) Soft voice	B1	D1	A3	A2	B5	D2	C1	D4	B6	B3	B4	B2	C2	A1	C4	D5	C6	C3	C5	D6	Hoarse voice
9) Not breathy	B6	B2	A2	B5	D1	B3	A1	B4	D2	C3	C4	B1	D6	C6	A3	C2	D5	C5	D4	C1	Breathy
10) Assured	B2	B3	B6	A2	D1	B5	A1	D6	B1	B4	D2	C4	C6	A3	C3	C5	D5	C2	C1	D4	Hesitant and nervous
11) Smooth, fluent speech	B3	B2	B5	D1	A2	A1	D6	B6	B4	D2	B1	C3	C6	A3	C4	D5	C5	C2	C1	D4	Stumbles over words
12) Few Canadianisms	A3	B5	B6	B1	C6	D4	C2	D2	B2	D6	A2	D5	A1	B3	C4	C3	D1	B4	C5	C1	Many Canadianisms
13) Few mis-pronunciations	A1	A2	B3	B4	B2	C2	C3	D1	B5	C4	C6	A3	B1	D2	D5	C1	B6	C5	D4	D6	Many mis-pronunciations
14) Few hesitations	A1	A2	B2	B3	D1	B4	B5	D6	B1	C3	D2	B6	C4	C5	C6	C1	C2	D5	A3	D4	Many hesitations
15) Short time for passage	C3	B1	A2	D1	B2	B4	D2	C2	B5	A3	A1	B6	B3	D6	C5	C6	C4	C1	D5	D4	Long time for passage

from the analysis, the differences between Cs and Ds would probably not be significant and if anything the Cs would be higher.

However, notice that one other category D speaker, D6, is also rated higher than all of the Cs on each of these intonation and confidence speech variables, yet he has only had seven years of education. D6 differs from D1 and D2 in his received speech ratings in that he is lower on articulateness and accuracy of pronunciation (#1 and #2), and he has a more French Canadian accent (#3). Pronunciation accuracy and accent, according to Figure 7 are purely competence, while amount of intonation (#5) and the hesitant-nervous variable (#10) reflect benevolence as well as competence (with the nervous person being un-benevolent), so it should be expected from these speech variable orderings that D6 would be lower on the factor of competence in his personality ratings (Figure 9) than D1 and D2, and equal on the benevolence factor. He is lower on competence, and actually somewhat higher on benevolence.

We now have the tentative hypothesis that judgments of competence are made from accent and pronunciation accuracy and articulation, while judgments of benevolence are made from intonation, fluency, and nervousness. D4 is the lowest of all speakers on all of the speech variables except a few like pitch and hoarseness, and he is also the extreme lowest on both competence and benevolence personality factors, giving further support to the hypothesis. However, as shown in Figure 17, variables like amount of intonation and nervousness only correspond roughly to benevolence, and many of the speaker orderings violate the tentative hypothesis. For

example, C5 is one of the lowest on amount of intonation (#5), and fluency (#11), and he is one of the most nervous (#10), and yet he is higher than any speaker on the benevolence factor. At this point it is not obvious what aspects of speech raters use for their judgments on the benevolence dimension, but it seems that the rules they do use are rather complex.

Certain hypotheses can be suggested by making comparisons of speakers of opposite positions on the benevolence personality dimension. C5 and D4 are extreme opposites on the benevolence dimension, and yet in terms of speaker orderings on the speech variables they are almost the same. They are both very inaccurate and inarticulate in their pronunciation, neither is fluent, both are nervous and intonate very little, but they do differ in that C5, the "benevolent" speaker, gives the impression of speaking much faster (#4), has a hoarser voice (#8), and uses more Canadianisms (#12). It may be that when two speakers are equally inaccurate in inarticulate in their pronunciation, and equally low in amount of intonation and fluency of speech, the one who uses more of the local pronunciations will be judged to be more benevolent. (Perhaps the other will sound like he is "putting on" the more Continental pronunciation.)

The judgments of competence are quite clearly and linearly related to a number of speech indices, and show up with simple correlation, but such a gross technique is of very little help in understanding judgments of benevolence. The information of Table 6 (in an earlier section of this chapter) further suggests that judgments of benevolence are relatively idiosyncratic, since raters show little agreement in their ratings on

benevolence adjectives. From this finding it looks as if judgments of benevolence are not only derived from complex combinations of speech dimensions, but are also very much affected by differences among those who are making the judgments.

One general principle does emerge with respect to the benevolence dimension, but it concerns large groups rather than individuals. As was hypothesized in a previous section, raters see members of their own cultural group as being more benevolent than members of other cultural groups. In Lambert's (1960) work referred to earlier, he found that both French and English Canadians rated French Canadians lower than English Canadians on competence adjectives, but each rated their own group higher on benevolence adjectives. Similar findings were obtained with a comparison of Jewish and gentile college students (Anisfeld, 1962). It will be noted that an exception to this principle was found in a previous section. French Continentals were rated higher by French Canadians on benevolence than were other French Canadians and the principle was restated to the effect that the cultural group with which the rater identifies most strongly (his own culture or another) will be rated highest on benevolence.

It seems that not only do French Canadian raters have high agreement among themselves concerning the relative competence of various French Canadian speakers but even between two ethnic groups there is agreement as to the relative competence of the groups, even to the extent that members of one group will state that representatives of their own group are less competent than representatives of another group. The basis of comparing

ethnic groups on benevolence seems to be more ethnocentric with each favoring his own (or one that he identifies highly with). Perhaps the same principle will be found to operate in the perception of benevolence for different members within a group. Maybe those speakers whose speech is most similar to that of the rater are judged to be more benevolent.

Conclusions from linguistic and personality-rating analyses. The differences between upper and lower class French Canadian speech generally seem to center around the same dimensions that differentiate French Canadians from Continental French, with upper class French Canadians being higher than lower class French Canadians but considerably lower than the Continental French on these dimensions.

This French Canadian - Continental French speech dimension is also very closely linked to the rating a speaker will receive on the competence dimension. That is, the more continental a person sounds the more competent he is judged to be. Two alternative hypotheses could be put forth to account for this:

Hypothesis I. French Canadian is an inherently inferior dialect because it has evolved from a rural population and by a "melting together" of many other patois or dialects, whereas the standard French of France was developed as a language of royalty and of the educated elite, much more independent of other dialects, and was later adopted by the general populace. If the French Canadian breathiness, heaviness of rhythm and relative lack of articulation is really expressive of a "laziness" in speech as Gendron (1966) says it is, then this might be evidence that French Canadian is a dialect

of the lower classes and is inferior to Continental French. This could be tested by having French speakers from Canada and France of equal SES levels rated on personality and linguistic dimensions by raters who are entirely unacquainted with the French language. If French Canadian is a lazier form of speech, it should be rated so by these "naive" raters (as it was found to be by the French-speaking raters of this study).

Hypothesis II. The second possibility and the one that seems more likely, is that the higher ratings by French Canadians of Continental French speech are reflections of the relative prestige of the two cultures, France and French Canada, in the eyes of French Canadians.

In line with the second hypothesis, Gendron's contention (1966) that upper class French Canadians try to make their speech like Continental French speech suggests that the Continental French culture is given much deference by French Canadians.

It could be argued that just showing that the speech of upper-class members of French Canadian society is more similar to the prestige or standard dialect of France than it is to the speech of lower-class French Canadians doesn't show that they are imitating the speech of France. It is probably the case in most languages that upper class members of various dialectal regions are more similar in their speech than lower class members of the same regions. But then, upper class Americans in different regions such as New England and the South don't seem to share the same "standard" form of English, nor do they seem to have much linguistic similarity with the upper class of England. It may be that the extent to which one dialect is

universal as the "standard form" of the language is expressive of imbalance in the relative prestige or status of the dialect regions in the minds of the speakers of the language. For example, the U. S. is probably much more equal in status to Great Britain (in the eyes of both groups involved) than is French Canada to France. It is hypothesized that a dialect region will develop a unique "prestige dialect" of its own only to the extent that the members of that region feel equal to other dialect regions (in particular to the older regions from which the "standard form" derives). It is important to note that Labov (1966) has found that the older generations of New York's elite modelled their speech upon that of upper-class New Englanders, but the younger generation of elite model their speech upon that of the upper class groups of the midwest. In both cases the speech is modelled upon fellow-countrymen.

The patois of Ile de France became the standard form of French because of the importance of Paris as a center of trade first and later of culture and education (Barbeau, 1939). "Standard French," or the patois of Ile de France became the language of royalty in other countries (Prussia and Russia, for example) and was for many years the language of the learned in Europe. It only became adopted by the general populace in France as late as the 1800's. That may make it even more difficult for new "prestige dialects" of French to emerge.

There are probably other reasons for the acceptance of France's "standard form" as the standard form in French Canada. There are some very obvious differences between the histories of the French and English

speaking peoples on this continent, which could explain why American and maybe even English Canadians have developed their own "prestige dialects" (if it is true that they have) while French Canada has kept the French of the mother as its "standard form."

The French have grown up in America as a minority group dependent upon English Canada, first as political subjugates and later as economic dependents. One of the major differences is that of industrialization. More than anything else, it is probably the economic prosperity from industrialization that has made English America feel presumptuous enough to assert itself as equal with the established countries of Europe. Perhaps because of this the United States declared linguistic independence from the mother country as well as political. It is likely that the new country with its expanding economy and increasing world eminence had enough self esteem to emphasize her own culture apart from the total English speaking culture and to develop her own "standard forms" of English. Industrialization has been a very recent development in Quebec, and "has been financed, directed, and controlled from the outside" (Lamontagne and Faucher, 1953), and French Canada has probably not felt quite as justified in asserting herself linguistically.

Weber's hypothesis holds that Protestantism is the major cause of industrialization and economic growth. McClelland (1961) has amassed impressive amounts of data in support of Weber and has demonstrated how Protestant child training practices create the entrepreneurs who bring about this industrialization. This, along with the example of other

Catholic countries in America suggests that even if French Canada had grown as an independent country on this continent, she would have been very slow and very late in industrializing. (Perhaps even slower than she has been since most of her industry has been backed by U. S. and English Canadian capital.)

It is hypothesized that since industrial and economic growth in newer countries lead to a feeling of cultural equality with the mother countries, and since as McClelland has shown, Catholic countries are slow to industrialize, Catholic countries or ethnic groups within a country will tend to feel more culturally subordinate to the mother country than Protestant countries will, and this feeling will be expressed in their tendency to retain the prestige dialect of the mother country as their "standard form." Other factors of conservatism, such as the emphasis upon tradition and classical education and the older professions (doctor, lawyer, etc.) rather than industrial professions would tend to strengthen this linguistic dependence. It is further hypothesized that Catholic countries or ethnic groups within a country will use members of the mother country as their reference group (in sociological terms) more than will Protestant countries. An additional general hypothesis suggests itself from our findings: that newer Catholic countries or ethnic groups within a country will consider themselves to be less competent but more benevolent than their Protestant neighbors but lower on both the competence and the benevolence dimensions than members of their "mother culture."

France

Differences Among Rater Groups.

Comparisons Among Schools. The emphasis in personality judgments up to now has been primarily upon the general trends that run through French Canadian eleventh grade boys as a whole. Now that some of the linguistic bases of these judgments (at least those of the competence dimension) have been established, the total group of French Canadian boys will be broken down into sub-groups in order to compare the different ways each group interprets the linguistic cues.

As discussed in the method chapter, the raters were taken from three schools located in three different areas of Montreal. (Refer back to Table 3, Chapter II for a description of the differences among the schools.) Figure 18 shows the factor analysis pattern (relationships between the adjectives and the two factors, competence and benevolence) for the ratings of father speakers given by boys from School 1 (high SES private school with a Continental French orientation.) Figure 19 and Figure 20 display the factor patterns for School 2 (high SES public school) and School 3 (low SES public school) respectively.

It might be expected that School 1 and School 2 would be most alike in their rating patterns since they are at least of the same general SES level. However, the factor patterns show that it is the Continental French oriented private school (School 1) and the low SES school (School 3) that are most similar in their rating patterns. They both consider benevolence to be relatively independent of competence as shown by the position of such adjectives as gentil and aimable. This is the same pattern that is

Figure 18. Graph of the Rotated Factor Pattern for the Personality Adjective Ratings Given Father Speakers By Raters from School 1

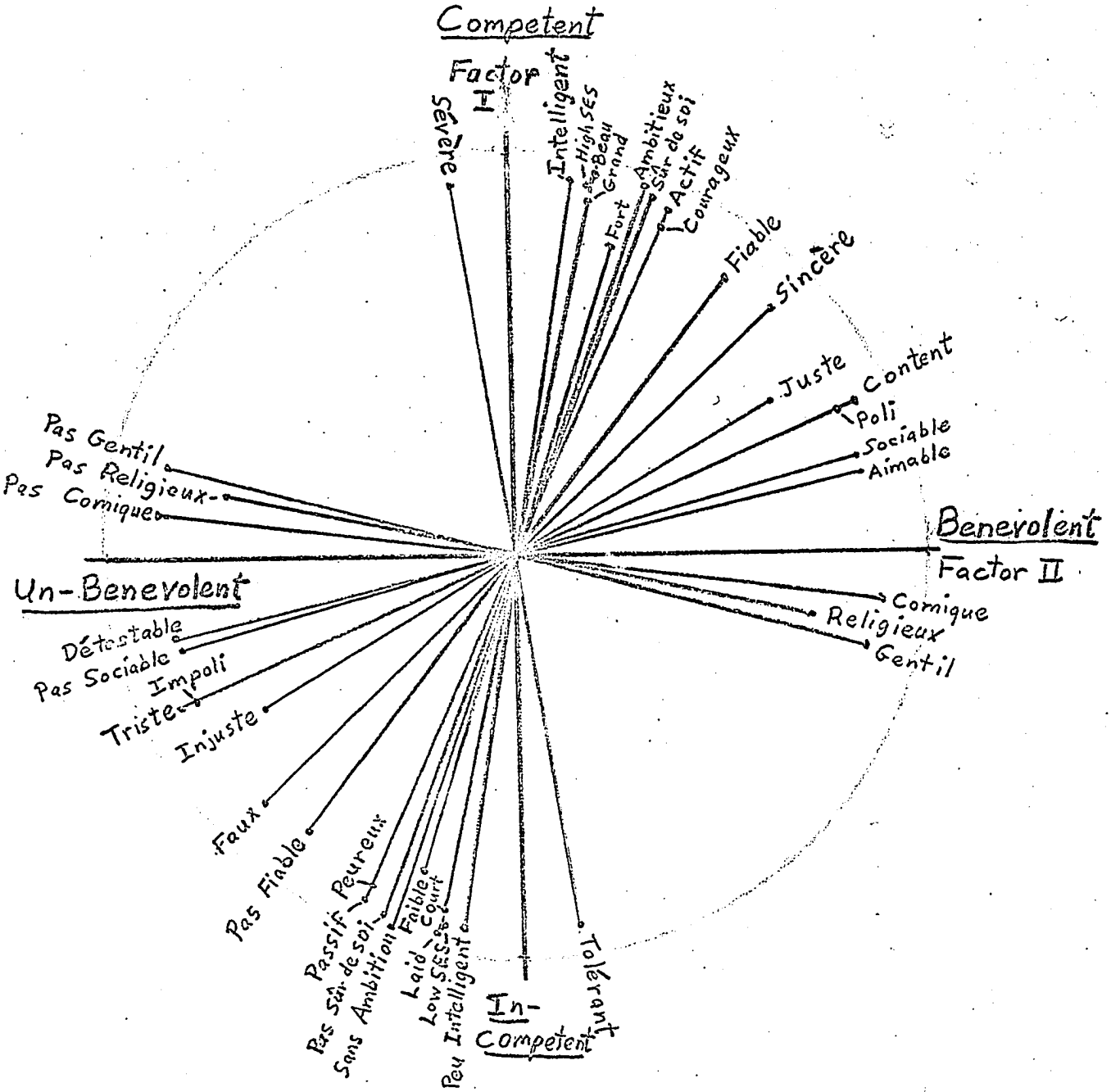


Figure 19. Graph of the Rotated Factor Pattern for the Personality Adjective Ratings Given Father Speakers by Raters from School 2

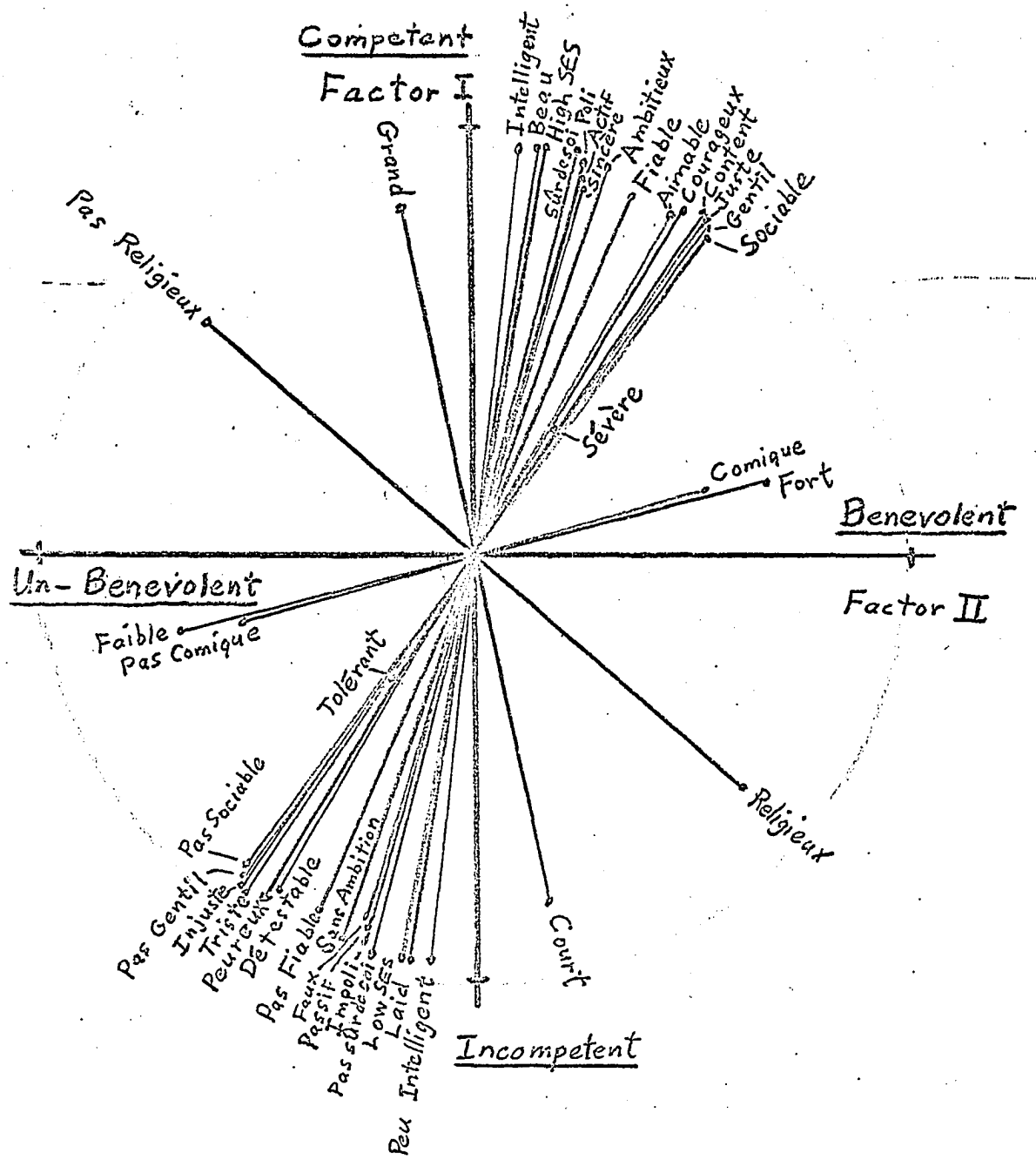
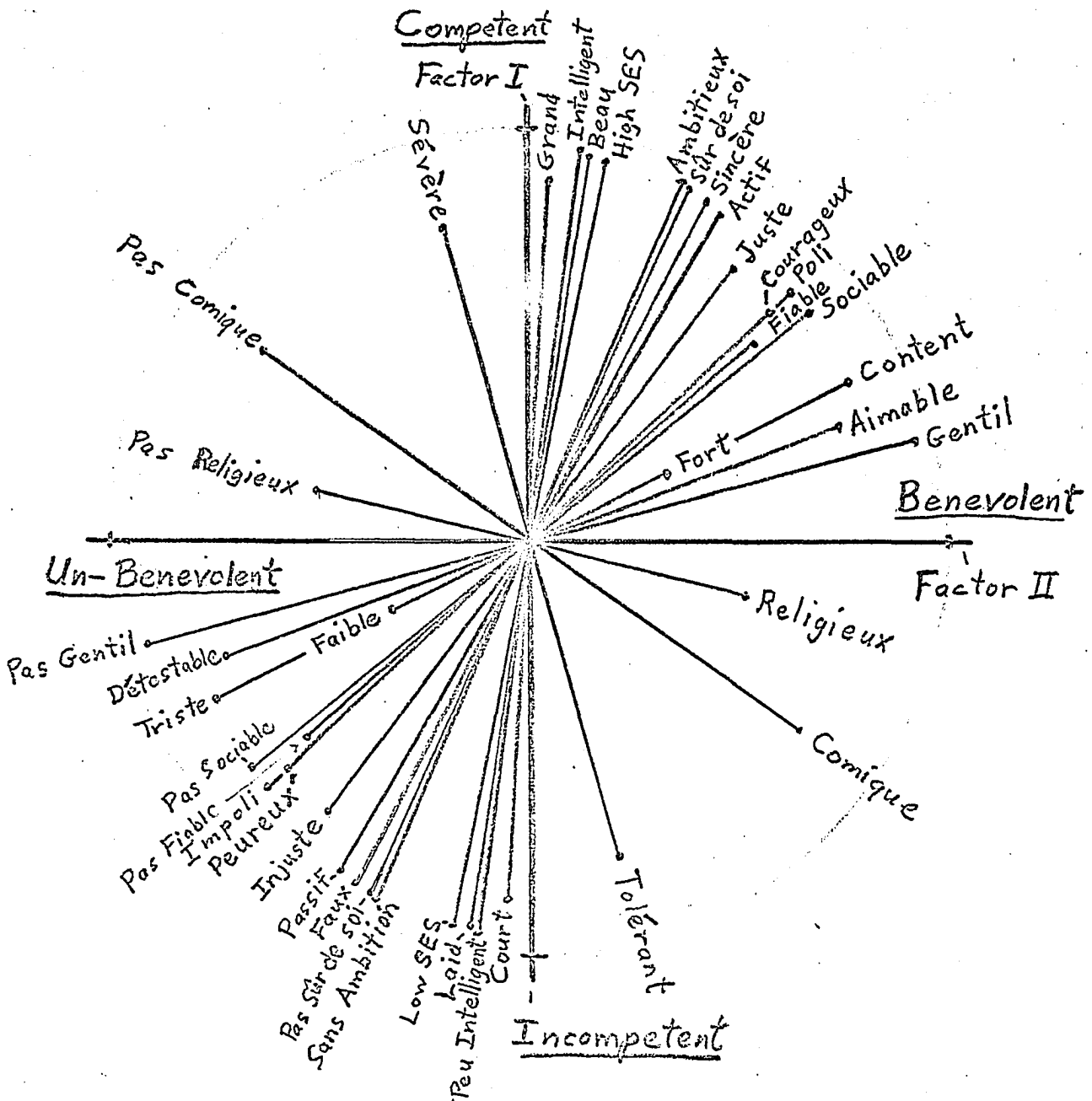


Figure 20. Graph of the Rotated Factor Pattern for the Personality Adjective Ratings Given Father Speakers by Raters from School 3



found when all of the raters in all three schools are pooled together (Figure 8). The raters from School 2 are different in that for them competence and benevolence are highly correlated.

When the ratings received by each SES group of speakers are compared for each of these schools (Tables 2, 3, and 4 of Appendix B), raters from all three schools agree in rating the upper SES level speakers higher than those of lower SES on competence adjectives, and for each school the competence factor positions of speakers correspond very well with their relative SES levels (see Figures 21, 22, and 23). For School 1 and School 3 the benevolence adjectives are independent of SES categories on the whole (as would be expected since the benevolence factor is independent of the competence factor), but not for School 2. On gentil, the most distinctive adjective of the benevolence factor, School 2 rates the upper SES speakers significantly higher than the low SES speakers. School 1 actually reverses the ratings on this adjective with the lower SES speakers being rated significantly more gentil than the upper SES speakers. For School 3 the difference between the two major SES groups on gentil is not significant.

The raters from School 3 are saying in effect that one's competence has nothing to do with one's benevolence, that there are benevolent and un-benevolent people from each SES level. Those from School 1 are saying about the same thing although they suggest that incompetent people might even be a little more gentil than competent ones. In contrast, the raters from the high SES public school, School 2, seem to be saying that those who

are more competent are also more benevolent, implying that benevolence is spread a bit thin among those of low SES. Since raters from School 2 generally come from the upper end of the SES scale, this is a rather egocentric and uncharitable view for them to take.

Actually, the School 2 boys are the ones whose ratings deviate least from what would be expected. When dealing with inter-ethnic-group perceptions, it has been found that raters from each group are in agreement as to the relative evaluations of groups on the competence dimension, but they disagree on benevolence, in that each thinks his own group is more benevolent. If SES levels can be considered as "groups" in this same way, the ratings of School 2 fit this pattern very well. They consider their own SES group to be more benevolent than the working class. All three rater groups agree that the "white collar workers" are more competent than the working class (which is good evidence, incidently, that the SES scale is a vertical one in everyone's eyes, even those from the lower levels). The boys from the low SES school, School 3, are somewhat more charitable than those from School 2, in that they consider benevolence to be independent of SES, rather than maintaining that their own SES group is more benevolent. But School 1 boys, the ones from the high SES private school, are the ones whose behavior is most intriguing; they reverse the pattern by considering the low SES speakers to be more <u>gentil</u> than speakers of their own SES group.

School 1 is a very high status private school with very stringent academic requirements and with teachers from France. (The high status of French Continentals among French Canadians has already been established.)

One might expect all of this to make for some rather snobby students, but the evidence here suggests that perhaps it makes students who have more of a regard if not a concern for the less successful and less fortunate. Of course there could be many alternative explanations. For example, many of the students in this school come from France, and it may be that because of not being members of the French Canadian culture they are more detached and impartial in their judgments of French Canadian groups. Even the French Canadian students in the school may come to view things in a similar way, both because of the continental atmosphere of the school and also because of the peer group influence. The bicultural atmosphere of the school (to the extent that French Canada and France are considered separate cultures) may give students more of a "world view" as contrasted with the egocentrism expressed by School 2 raters.

Another possibility is that those families who send their sons to School 1 are more established in the upper SES levels, and they as well as their sons have less need to emphasize their differentiation from lower levels. This fits well with the finding that the upwardly-striving middle-class speakers are most sensitive to linguistic improprieties and often overcompensate (Labov, 1966). These ideas need further testing.

Figure 21 shows the relative scores of each father speaker on the competence and benevolence factors computed from his average received adjective ratings given by boys from School 1. Figure 22 shows the same for ratings that speakers received from School 3. Raters from the two schools agree with each other amazingly well in their evaluations of speakers on

Figure 21. Plotting of Each Father Speaker According to His Factor Position Received from School 1 Raters

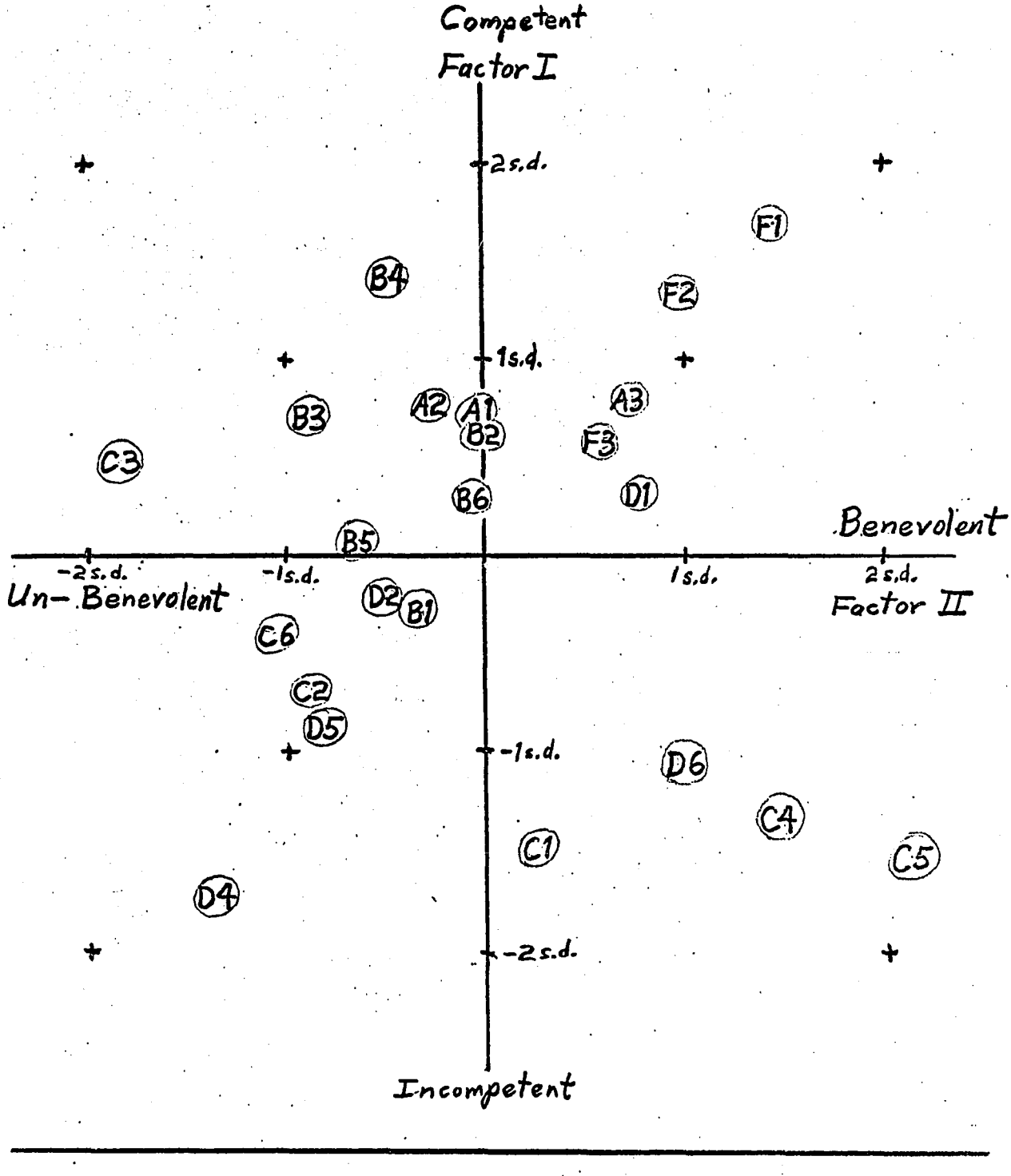
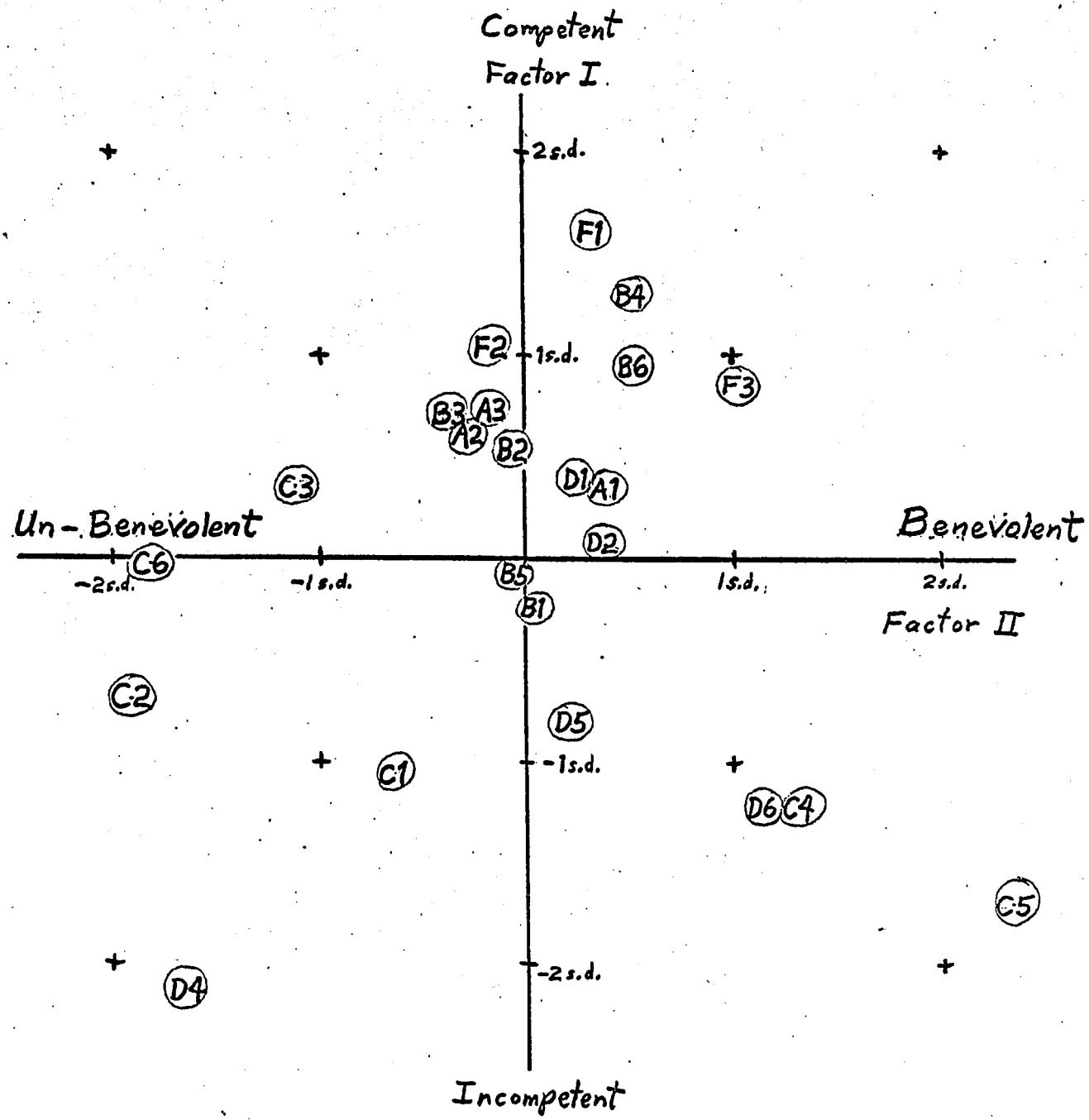


Figure 22. Plotting of Each Father Speaker According to His Factor Position Received from School 3 Raters



these two factors. The major difference is that School 3 has less of a tendency than does School 1, the French-oriented private school, to give the Continental French speakers extremely high ratings.

This same diagram could not be made for School 2 ratings, since benevolence adjectives are highly correlated with competence for them and the second factor does not therefore reflect benevolence. The second factor is defined by the two adjectives comique and fort and seems to make little sense. Table 15 shows that this second factor for School 2 only accounts for 16.73% of the total variance in adjectives. (Since there are 20 adjectives, this is about the same as the amount of variance in three adjectives, which would be 15%.) In contrast, the benevolence factor accounts for 29.66% in the ratings from School 1 and 25.34% in the ratings from School 3.

Table 15. Percentages of Total Variance in Adjectives Accounted for by Each Factor for Each Group of Raters

	Total of 3 Schools	School 1	School 2	School 3	Linguistic Judges
Factor I	48.21%	48.81%	60.93%	45.12%	37.97%
Factor II	35.76%	29.66%	16.73%	25.34%	23.71%
(Factor III)					14.38%
Total of Factors	83.97%	78.47%	77.66%	70.46%	76.06%

In order to show how speakers were ordered on competence and benevolence by School 2, a graph similar to the one used for the factor scores of the ratings of Schools 1 and 3 was made using intelligent and gentil (the dominant adjectives of the competence and benevolence factors) as axes. This graph for School 2 is given in Figure 23. This same graph was constructed for School 1 raters (Figure 24) in order to show how well the plottings on these two adjectives correspond to the plottings on the competence and benevolence factors for that school (Figure 21). The two plottings for School 1 (Figures 21 and 24) give similar, although of course not exactly the same, patterns; suggesting that Figure 23 gives a close approximation to School 2 boys' ratings of speakers on competence and benevolence.

The most obvious feature of the plottings on intelligent and gentil for School 2 is the high correlation between the two dimensions: almost all high SES speakers are rated high on both intelligent and gentil, and almost all low SES speakers are rated low on both. The correlation between gentil and intelligent for School 2 is .81, whereas for School 1 it is -.02. Aimable and sociable (also benevolence adjectives) correlate .76 and .77 with intelligent for School 2, but only .30 and .37 for School 1.

From Figure 23, it appears that School 2 raters give extremely high ratings to Continental French speakers on both of the two dimensions, much more than do School 3 raters, but still less than raters from School 1 do. However, in considering speakers scores on the competence dimension only, it appears that School 2 raters pay even greater deference to the Continental

Figure 23. Plotting of Each Father Speaker According to His Ratings Received from School 2 on Intelligent and Gentil

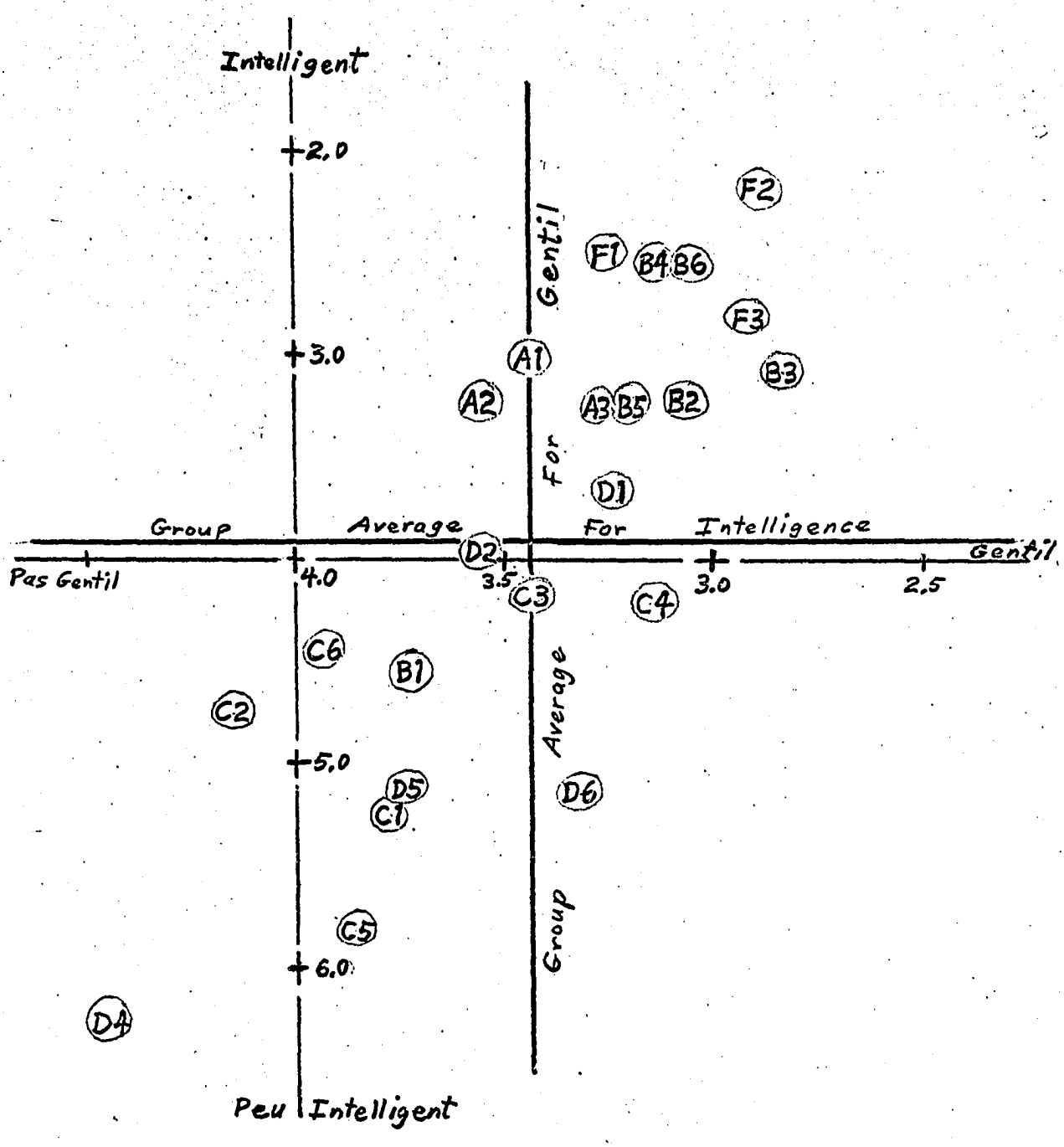
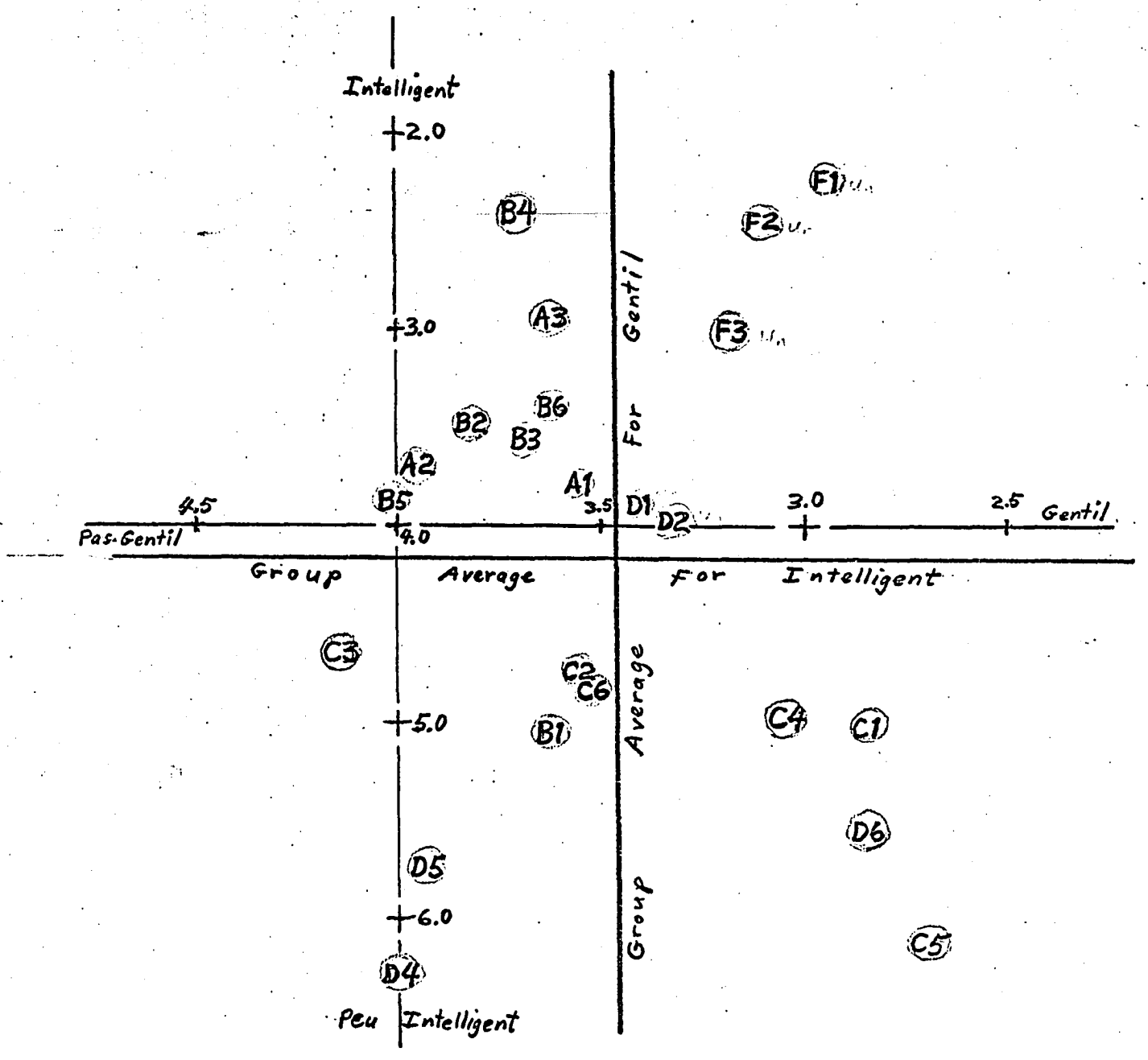


Figure 24. Plotting of Each Father Speaker According to His Ratings Received from School 1 on Intelligent and Gentil



French speakers than do School 1 raters. The ordering of speakers on the competence factor, from most favorable to least favorable, according to School 2 raters is as follows:

(F1) (F2) (F3) B4 A2 B2 B3 A1 A3 B6 D1 B5 C3 D2 B1 C2 C6 C4 D6 D5 C1 D4 C5

with the three Continentals being the three highest. On the other hand the ordering for School 1 is:

(F1) B4 (F2) A3 A2 A1 B3 B2 (F3) C3 D1 B6 B5 D2 B1 C6 C2 D5 D6 C4 C1 C5 D4

and that for School 3 is:

(F1) B4 (F2) B6 (F3) A3 B3 A2 B2 D1 A1 C3 D2 C6 B5 B1 C2 D5 C1 D6 C4 C5 D4

The final picture is that on the competence dimension it is School 2 raters who give the Continental French the highest relative position as far as rankings are concerned. However, on benevolence it is School 1 that favors the Continental French most, which fits the hypothesis that raters consider their own group to be most benevolent (since some of the raters in School 1 are from France). However, the tendency to rate Continentals higher is also present in School 2 raters, and to a lesser extent in School 3 raters. In the ratings by School 2 and School 3 raters on the three main benevolence adjectives, gentil, sociable, and aimable, the difference between average ratings of Continentals and those of upper class French Canadians favors the Continentals in five out of the six cases (the six cases are the 3 adjectives for each of the two schools), with four of the five cases being significant. (See Tables 5, 6, and 7 of Appendix B.) In no case is there a reversal that is significant.

Perhaps the most important thing to notice from the diagrams of speakers'

positions on the factors for each school of raters (Figures 21,22, and 23) is the agreement between the schools not only as to speakers' competence, but also benevolence. Although the linguistic determinants of the benevolence judgment could not be clearly pointed out as they could be for competence, and although individual raters have low agreement in their ratings on benevolence adjectives, these diagrams show that there is an amazingly high correspondence between the general positions on the two factors given speakers by one group of raters and that given them by another. Note particularly how well speakers who are extremely high or low on benevolence (like D4, D6, C5, C2, C4, etc.) maintain their positions on that dimension. The major changes are due to School 2's tendency to regard low competence speakers as low on benevolence. Table 16 gives the intercorrelations between the factor scores received by speakers in the judgments of each of the rater groups. Although the intercorrelations are higher for the competence factor on the whole, they are also moderately high for benevolence. Schools 1 and 3 agree quite well in their judgments of benevolence but School 2 has less agreement with each of them. It seems, then, that there are some rather stable differences between speakers in the benevolence impressions they evoke, and although individual raters don't agree highly in their assesments of benevolence, the same general pattern runs through groups of raters. It will have to be the task of future research to discover the linguistic cues that evoke the benevolence impression.

Schools 1 and 3 still seem to fit quite well the hypothetical implicit

Table 16. Intercorrelations Between Father Speakers' Received Factor Scores from Each of the Rater Groups

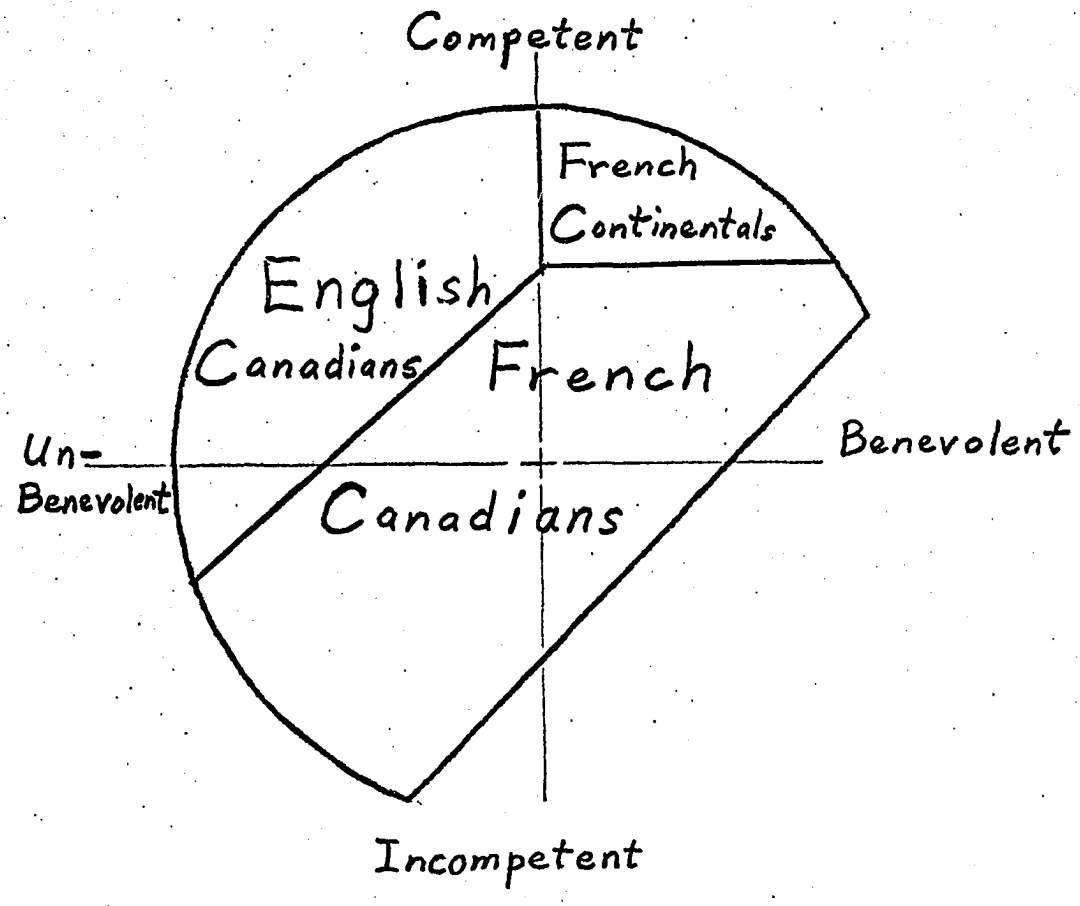
		Intercorrelations Among Competence Factor Scores			Intercorrelations Among Benevolence Factor Scores			
		Rater Groups				Rater Groups		
Rater Groups		School 2	School 3	Linguistic Judges[a]		School 2	School 3	Linguistic Judges[a]
	School 1	.95	.97	.80	School 1	.33	.75	.52[b]
	School 2		.93	.78	School 2		.55	.53
	School 3			.78	School 3			.71

[a] The ratings given voices by the linguistic judges are discussed in the next subsection.

[b] Factor II of the linguistic judges' ratings is used here as their benevolence factor. Their Factor III is much less related to the benevolence factors for the three schools and seems to represent another dimension of judgment.

personality theory diagram of Figure 12. However, the diagram will have to be modified somewhat for School 2 raters, since their personality theory doesn't seem to make allowance for a group of low-competence French Canadians who are high on benevolence. (See Figure 25.) The English Canadians probably still fit the villian role (low benevolence and high competence) for this group of raters who seem to be high on ethnocentrism. According to the idea of Adorno, et al. (1950) that prejudice is not specific toward one group, but is a general trait of the perceiver, the boys from School 2 would be expected to be higher than those of School 1

Figure 25. Hypothetical Implicit Personality Theory of School 2 Boys



and perhaps even those of School 3 on many measures of prejudice.

A comparison of Figures 18, 19 and 20 shows that raters from School 2 consider religieux to be negatively correlated with competence and independent of gentil, whereas the other two schools see it as being almost purely a benevolence dimension, highly correlated with gentil and independent of competence. This suggests that the raters from School 2 might also be more anticlerical in their attitudes.

Table 17 shows the percentage of raters from each school who judge each speaker to be from France. Surprisingly, School 1 raters don't seem to be much better than even those from the low SES school at detecting accent. Since they are more familiar with the Continental accent, and probably many of them even use it, it might be expected that they could differentiate it better. However, the evidence here indicates that the Continental accent or style is quite familiar to those of all SES levels and quite easily distinguished by them.

One question remains. Since low SES raters can recognize the differences between Continental and Canadian speech and since they seem to put more value on the Continental, why don't they imitate it as do those from the upper SES levels? Probably many of them do or at least will. Since the raters used in this study have already had more education than 64% of the lower SES level fathers in the speaker sample of this study, it is likely that many of them will eventually become quite similar

Table 17. Percentage of Raters from Each School Who Judge Each Speaker to Be from France

	Speakers											
	F1	F2	F3	A1	A2	A3	B1	B2	B3	B4	B5	B6
School 1	78%	83%	87%	0%	26%	4%	4%	4%	0%	14%	4%	17%
School 2	84%	50%	90%	3%	11%	3%	3%	0%	0%	7%	0%	11%
School 3	93%	93%	93%	18%	16%	23%	10%	7%	10%	17%	7%	10%

to the upper SES group both in occupational level and in speech. Probably many of these raters are the upwardly mobile French Canadians discussed in the linguistic differences section, since they have already progressed further in school than most of their fathers. It would be useful to know whether men who have ended up in the lower SES levels would be able to recognize the difference and would also favor the Continental accent (which is similar to the upper-class accent in Canada) as the teen-age boys in this study do. Even if they do favor it, the evidence from the linguistic differences section suggests that many aspects of this accent, such as pronunciation, are very difficult to master and require years of contact with those who speak it. To recognize a difference is probably a much different matter than reproducing it, and also, as was expressed in the previous section, language style is expressive of value systems and will probably only change in conjunction with them. A construction worker who starts talking like a French aristocrat would probably encounter strong pressure from his co-workers and family. Admiring or admitting the superiority of another group is not the same as wanting to be like them, or actually taking on their behavior. Shuy (1968) maintains that many "non-standard" usages are not deficiencies but rather a result of the speaker's "need to preserve non-standard for appropriate social situations."

Personality ratings by linguistic judges. The judges used for the linguistic variable ratings were all older and also further in their education than the 10th and 11th grade boys from the three schools (who made the personality ratings). Three of the group were graduate students

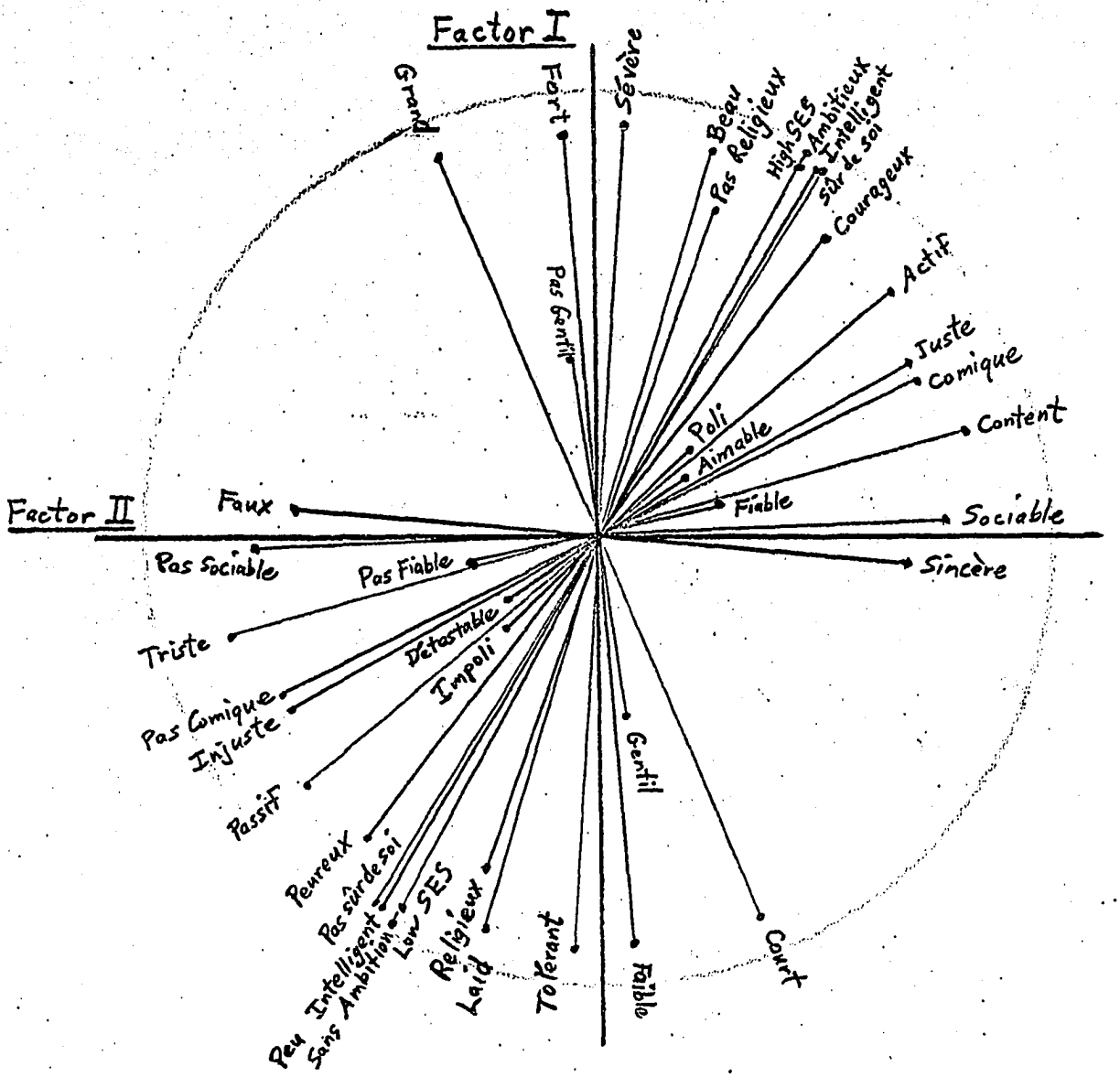
(a male from Algeria, a male from Quebec, and a female from Quebec), and the fourth was an actress from France in her mid-twenties. Before they judged and scored the voices on the linguistic dimensions, they rated the personality of each speaker on the 20 adjectives in the same way as the boys from the three schools had done. The factor pattern for the ratings of father speakers by these linguistic judges is given in Figure 26.

The linguistic judges consider gentil, poli and aimable to be highly related to one another but independent of adjectives like sociable, sincere, and content, and a third factor is thus formed. The diagram of the first two factors is very much like those for the competence and benevolence factors found in the ratings by French Canadian high school students, except that the adjective gentil, which is most purely expressive of benevolence in the factor analysis diagrams for high school students, now forms a separate factor. (Gentil is for the linguistic judges, incidently, slightly negatively correlated with competence.) Factor I still reflects competence. Notice in Table 16 that Factor I from the ratings of linguistic judges correlates highly with the competence factor for each of the three schools, although not nearly as highly as the competence factors for the three schools correlate with one another. If the factor line were made to pass right through the center of the competence adjectives (intelligent, sûr de soi, ambitieux, etc.) it wouldn't be independent of Factor II (which might be called social attractiveness) but somewhat positively correlated with it. Such adjectives as sincère, juste and courageux, which are expressive of

Figure 26.

(Turn over page.)

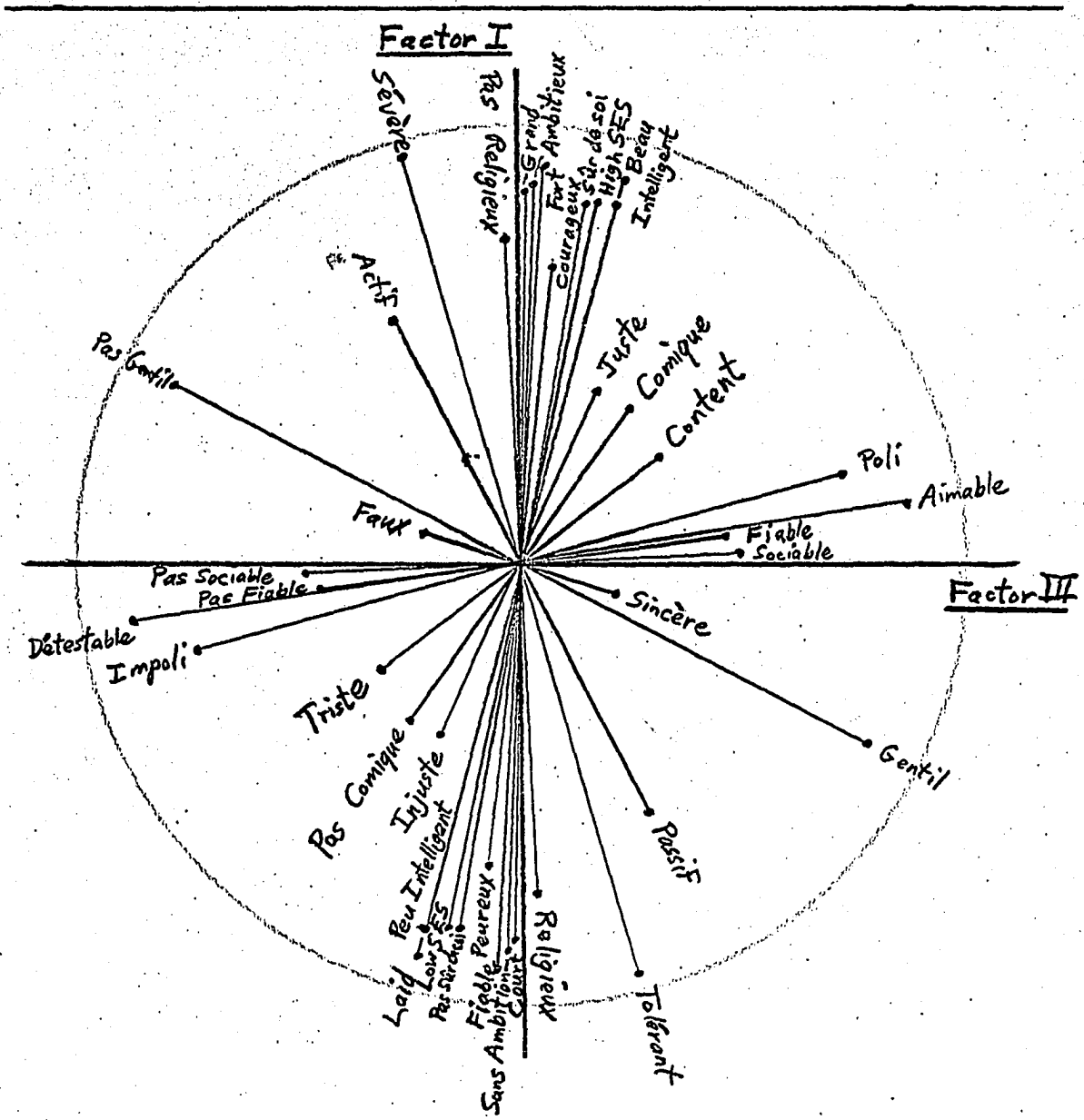
Figure 26. Graph of the Rotated Factor Pattern for the Personality Adjective Ratings Given Father Speakers by Linguistic Judges



Factors I and II

Note.- See next page for second half of this figure.

Figure 26. Graph of the Rotated Factor Pattern for the Personality Adjective Ratings Given Father Speakers by Linguistic Judges (Continued)



Factors I and III

personal integrity, are varying combinations of these two factors. Factor III is expressive of benevolence in a much narrower sense than in the earlier patterns, since it consists mainly of gentil, poli and aimable, and is quite independent of the three integrity adjectives mentioned. (The intercorrelations of linguistic judges' Factor II with the benevolence factors for the three schools are quite high as shown in Table 16. The intercorrelations between linguistic judges Factor III and the benevolence factors are not shown, but they are quite low, between .05 and .29, showing that the ratings on Factor II by linguistic judges are made on the same basis that the raters from the three schools judge benevolence, but their ratings on Factor III represent a new dimension of judgment.) Aimable in this third factor seems to be more expressive of "admirable" than "socially attractive," since it is almost entirely independent of the other social attractiveness adjectives. These raters who are older and more sophisticated seem to conceive of people in a more complex way. They can imagine a person being high on social attractiveness but not on kindness, or as being high on integrity but not kind.

The important point here is not how many factors emerge, since the number of factors is somewhat arbitrary.[10] The important point is how much adjective variance is accounted for by each factor, and the relation-

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[10] The experimenter arbitrarily determines how many factors will emerge in the factor analysis by specifying what percentage of the total variance in adjectives he wants to have accounted for by the factors. The specified percentage in this study was 70%. If it were set at 80%, probably one more factor would emerge in each factor analysis, corresponding to those adjectives that have a lot of unique variance (like fort and religieux in the factor pattern for School 3).

ships between adjectives (which ones are correlated with one another and with the factors and which ones are not). Table 15 shows that the competence factor accounts for more variance in the ratings by boys from the three schools than it does in the ratings by linguistic judges, which means that the linguistic judges are more complex in their judgments, since competence by itself doesn't explain as much for them as it does for the boys. It takes three factors to account for the same percentage of variance in ratings by linguistic judges, as is accounted for in the ratings by School 1 and School 2 boys with only two factors. But the most important evidence for a more sophisticated rating style among the linguistic judges is the lack of correlation between some of the variables like gentil and sociable that were correlated with one another (as the benevolence factor) in the boys ratings.

Future work. Observe from Table 15 that the two factors from the factor analysis of the average of ratings by the total group of 85 raters (31 raters each from Schools 1 and 2, and 23 raters from School 3) account for more variance in adjective ratings than the factor analysis of any school separately. It may be that averaging the ratings of many people, as compared with the averaging of only a few people's ratings, will tend to make the average ratings received on one adjective more like those received on another. Hence, the greater diversity of adjective ratings (more dimensions) in the case of the linguistic judges may be a result of having only four raters enter into the averaging-of-ratings process. Although some interesting differences among the rating styles of rating

groups emerge from these analyses, it must be remembered that these factor analyses were performed on the average ratings given by a group of people and may be an oversimplification of the implicit personality theory of any one person in that group. Hopefully such a procedure yields the common themes that run through the rating styles of most members of the group. The follow-up to this study must include a careful study of individual rating styles and how they relate to these group results.

It must also be remembered that this analysis represents only one of a multitude of ways of evaluating the data. There are many other factor analytic methods besides the Jacobi-Kelly Principal Axis Solution which was employed here, and other criteria of factor rotation that would give slightly different results from those that were obtained in this study by the use of a varimax rotarion. Hopefully, the major trends would not be altered. (In some cases, such as the factor analysis of the ratings of linguistic judges, an oblique rotation might have been clearer.) The converging evidence from three sources: the factor patterns, the differences between SES group averages, and speaker orderings (contingency tables) suggests that the major trends would not be altered by using other means of analysis. Perhaps the most important consideration in establishing the universality of the competence-benevolence dimensions in the perceptions of French Canadians by French Canadians is the choice of adjectives. In future work, it will have to be established that these dimensions were not built into the study by the adjectives chosen. The adjectives

were not chosen arbitrarily, but from the results of an earlier study (Preston, 1963) in which teen-age French Canadians were asked to list traits that are important to look for in choosing friends and traits that make for success.

Chapter IV

Mother Speakers: Results and Discussion

Speech Differences Among Mother Speakers. The speech samples of the mother speakers were rated and scored in terms of the same 15 speech variables as used for the father speakers. Table 18 shows the intercorrelations among the speech variables for ratings of mothers, and the graphic representation of the pattern of relationships is given in Figure 27. In general the pattern of relationships among the speech variables is about the same for mother speakers as it was for father speakers and conforms quite closely to the categorization of variables given in Figure 13 for father speakers. The accent variables (articulateness and accuracy of pronunciation, amount and appropriateness of intonation, and continentalness of accent) are all highly correlated with one another as they were for father speakers. However, only lack of nervousness (#10) and fluency (#11) of the confidence variables are highly correlated with one another for mother speaker ratings; whereas for father speakers, lack of breathiness (#9) was also a part of the confidence impression.

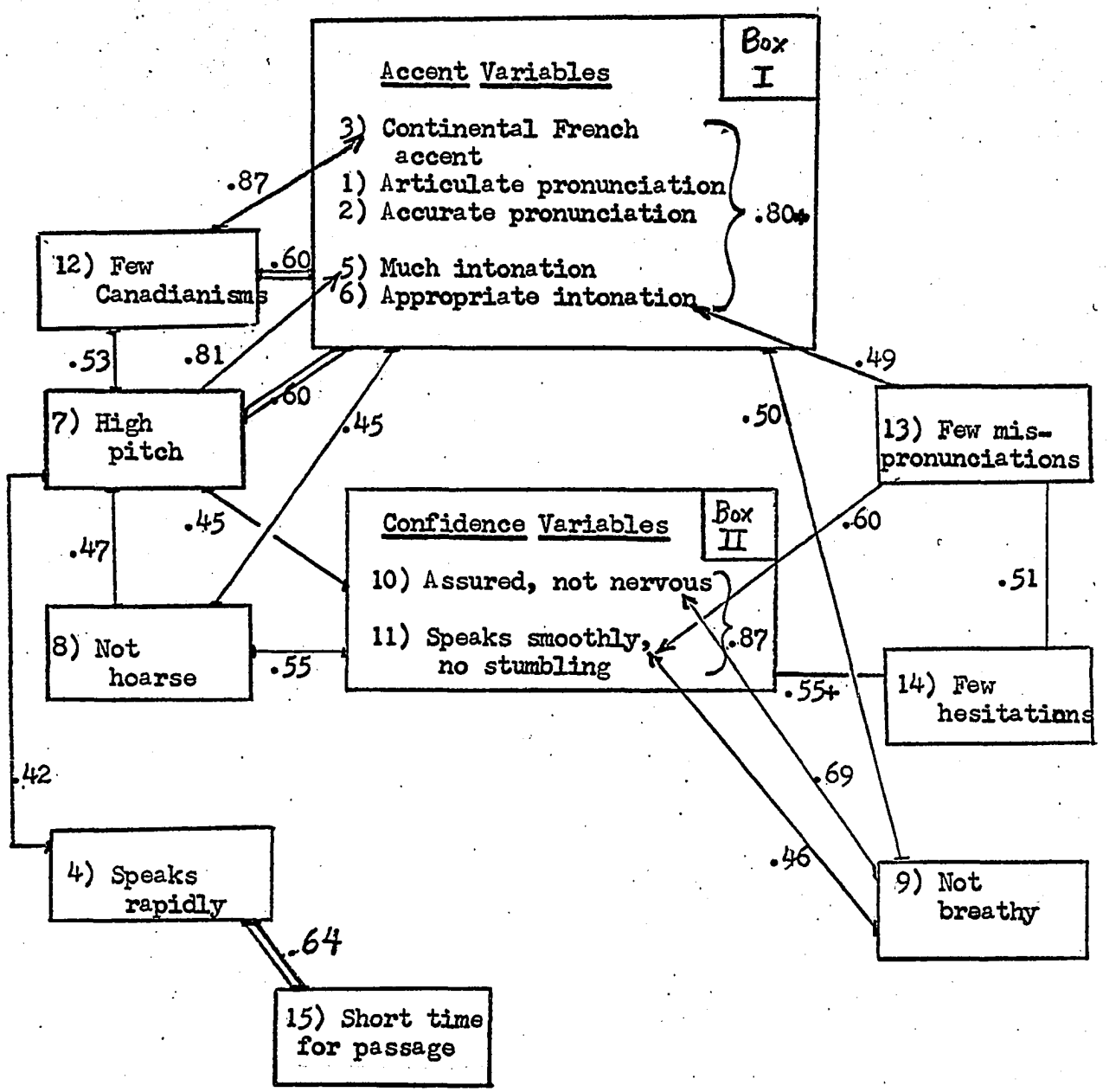
Breathiness (#9) seems to be a less important variable in differentiating mother speakers than it was in differentiating father speakers since it is not as related to fluency as it was for fathers (thus breathiness really doesn't fit so well for mothers as a confidence speech variable, in Box II). Although breathiness is related to the accent variables (Box I of Figure 27) for mothers, the relationships are weaker than in the case of father speakers.

The major difference between the pattern for father speakers and that

Table 18. Matrix of Inter-correlations Among Mother Speakers' Scores on 15 Linguistic Variables

	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1) Articulate pronunciation	.91	.73	.15	.83	.83	.57	.49	.56	.78	.76	.64	.36	.32	.38
2) Accurate pronunciation		.87	.05	.76	.84	.56	.55	.50	.76	.78	.76	.33	.32	.37
3) Continental French accent			.18	.71	.74	.67	.39	.45	.59	.58	.87	.19	.04	.40
4) Rapid speech				.39	.18	.42	-.11	-.08	.03	-.07	.06	.07	-.04	.64
5) Much intonation					.92	.81	.45	.49	.72	.72	.52	.39	.34	.38
6) Appropriate intonation						.68	.58	.51	.81	.85	.53	.49	.38	.42
7) High pitch							.47	.31	.40	.49	.53	.23	.18	.26
8) Not hoarse								.17	.45	.63	.18	.38	.37	.21
9) Not breathy									.69	.46	.36	-.10	.04	.17
10) Assured, not nervous										.87	.43	.29	.50	.39
11) Smooth, fluent speech											.37	.60	.65	.35
12) Few Canadianisms												-.10	-.11	.13
13) Few mis-pronunciations													.51	.33
14) Few hesitations														.16
15) Short time for passage														

Figure 27. Major Groupings of the 15 Speech Variables in the Ratings Given to Mother Speakers



Note.- The explanatory notes to Figure 13 also fit this figure.

for mother speakers is pitch (#7) which for mother speakers is much more related to the accent variables (Box I of Figure 27) than it was for father speakers. For father speakers a high-pitched voice was slightly associated with Continental accent as well as with the confidence speech variables. For mother speakers, however, pitch is still slightly associated with the confidence variables, but is much more related to the accent variables, especially amount of intonation (#5) with which it correlates .81. (It will be recalled that Boudreault says much intonation makes a voice sound higher.) Pitch is also related to hoarseness (#8) for mother speakers, with a correlation of .47 (a low pitch going with hoarseness), whereas the two were virtually unrelated for father speakers. A bass pitch accompanies a hoarse voice, as Moriarty and Rousey (1965) suggest when proposing their notion of masculine striving. In general, then, pitch seems to be a more important variable in the differentiation of mother speakers than it was with father speakers.

Total time for the passage (#15), which for father speakers was a combination of judged speaking rate (#4) and hesitations (#14), for mothers seems to be mostly a matter of judged speaking rate, since it is virtually uncorrelated with hesitations.

The two major groupings of variables, accent and confidence, remain about the same as for father speakers except for breathiness being left out of the confidence variables for mothers. Table 19 gives the average ratings and scores received on the 15 speech variables by each SES grouping of mother speakers as well as the comparison with the mother speakers from France.

Table 19. Linguistic Ratings of Mother Speakers Analyzed According to Speakers' SES Levels and Countries of Origin

A. Linguistic Ratings	Upper-class French vs. Upper-class French Canadians				Groupings According to Speakers' Husbands' Occupational SES Levels													
	French	A+B	%v	X2	total %v	AB vs. CD A+B	C+D	%v	X2	Avs. B A	B	%v	X2	C vs. D C	D	%v	X2
Prononciation:																		
1) Articulée, marquée	1.8	***3.0	.23		.18	3.0	***3.9	.18		2.8	3.1	.00		3.9	3.8	.00		
2) Juste	1.7	***4.0	.55	***	.32	3.9	***5.1	.32		3.8	4.0	.00		5.2	5.1	.00		
Accent:																		
3) Continental	1.2	***5.7	.85	***	.50	5.6	***6.6	.36	*	5.0	***6.0	.14		6.6	6.6	.00		
Vitesse du monologue:																		
4) Rapide	3.3	3.9	.00		.00	3.9	3.7	.00		3.6	4.1	.00		3.7	3.7	.00		
Intonation:																		
5) Beaucoup	1.9	***3.8	.22		.29	3.8	***5.3	.23		2.2	**4.2	.05		5.5	5.0	.01		
6) Juste	2.4	***4.4	.26		.32	4.4	***5.7	.19		3.3	***5.0	.12		6.0	* 5.5	.01		
Particularités de la voix:																		
7) Aiguë	2.4	**3.8	.41		.05	3.7	4.1	.05		3.7	3.7	.00		4.0	4.2	.00		
8) Douce	2.9	3.7	.47		.06	3.6	4.0	.03		4.0	3.4	.03		3.9	4.1	.00		
9) Peu haletante	2.4	* 3.3	.14		.25	3.1	* 3.6	.07		3.0	3.1	.00		4.0	**3.0	.18		
Particularités de l'individu:																		
10) Assuré et détendu	2.3	**3.5	.15		.13	3.5	**4.2	.08		2.8	**3.8	.05		4.2	4.1	.00		
11) Mots coulent sans accrocs	2.1	***3.5	.13		.10	3.4	**4.2	.07		2.8	* 3.7	.03		4.2	4.2	.00		
B. Linguistic Tallies																		
12) Canadianisms	0.1	***6.1	.65	***	.23	6.3	**8.2	.20		6.2	6.6	.00		7.6	8.8	.03		
13) Mispronunciations	0.9	1.0	.00		.21	0.9	1.0	.00		0.1	* 1.2	.13		1.3	* 0.5	.08		
14) Hesitations	0.7	0.4	.02		.06	0.3	0.5	.06		0.2	0.3	.00		0.6	0.5	.00		
15) Time for passage	130	***147	.23		.20	146	147	.00		130	***155	.20		146	149	.00		

Note.- This table is comparable to Table 9 which gives similar information for father speakers. Consult the notes to Tables 4 and 9 for detailed explanation.

Table 19a. Reliabilities of the Linguistic Ratings Given to Upper- and Lower-class French Canadians and Also of Those Given Continental French in Comparison with Upper-class French Canadians -- Mother Speakers

	Reliabilities for Continentals Compared to Upper-class French Canadians			Reliabilities for Upper-class Compared to Lower-class French Canadians		
	Estimate of Inter-rater Reliability	Estimate of Reliability of Average Received-Rating Scores	Confidence Levels for Average Received Ratings	Estimate of Inter-rater Reliability	Estimate of Reliability of Average Received-Rating Scores	Confidence Levels for Average Received Ratings
A. Linguistic Ratings:						
Pronunciation:						
1) Articulée, marquée	.69	.90	.005	.53	.82	.005
2) Juste	.72	.91	.005	.60	.86	.005
Accent:						
3) Continental	.84	.95	.005	.56	.84	.005
Vitesse du monologue:						
4) Rapide	.02	.08	n.s.	.35	.68	.05
Intonation:						
5) Beaucoup	.87	.96	.005	.67	.89	.005
6) Juste	.78	.94	.005	.80	.94	.005
Particularités de la voix:						
7) Aiguë	.39	.72	.01	.31	.64	.01
8) Douce (Rauque)	.12	.37	n.s.	.38	.71	.01
9) Peu haletante	.43	.75	.01	.38	.71	.01
Particularités de l'indiv:						
10) Assuré et détendu	.58	.85	.001	.63	.87	.001
11) Mots coulent sans accrocs	.77	.93	.001	.65	.88	.001
B. Linguistic Tallies:						
12) Canadianisms	.78	.91	.001	.35	.62	.01
13) Mispronunciations	.30	.57	.05	.43	.69	.01
14) Hesitations	.46	.72	.01	.12	.29	n.s.
15) Time for passage	.91	.96	.001	.83	.91	.001

Note.- Refer to Table 6 for further explanation of these reliability statistics.

Accent (#3) is the variable that is most related to SES for mother speakers; and the other variables of the accent group, including intonation (#5 and #6) and pronunciation (#1 and #2), are the next most related. The largest difference on accent (#3) and on the two intonation variables occurs at the split between aristocrats (category A speakers) and the other speakers at the same Blishen level (category B speakers). In fact the aristocrats are as much higher than speakers of category B in their average received ratings on the two intonation variables as the Continental French are higher than the aristocrats.

In general, the correspondence of the mothers' speech to SES is much less than that for fathers. The highest amount of variance in speech variables accounted for by SES groupings is 50% for accent as compared with 95% on the same comparison for fathers. Accent is also the only variable on which mother speaker orderings are related enough to SES to yield a significant contingency table.

The relatively lower correspondence between speech and SES for mother speakers isn't surprising, if one considers that family SES is determined by the occupation of the husband and would therefore probably be more related to his abilities and values than to hers. This fact is evident in Table 20 which shows how the perception of the mother speakers is related to their own educational levels. As would be expected, it is much more related than it was to their husbands' SES levels.

The four educational categories are the same as those used for father speakers: those with some university (Un), those with high school gradu-

Table 20. Linguistic Ratings of Mother Speakers
Analyzed According to Speakers' Educational Levels

A. Linguistic Ratings	Groupings According to Speaker's Educational Levels											
	total	Comparison 1				Comparison 2				Comparison 3			
	%v	Un&HS	HJ&El	%v	X2	Un	HS	%v	X2	JH	El	%v	X2
Prononciation:													
1) Articulée, marquée	.50	2.5	***4.0	.49	*	2.8	2.3	.01		4.1	3.9	.00	
2) Juste	.58	3.5	***5.2	.58	***	3.5	3.6	.00		5.1	5.4	.00	
Accent:													
3) Continental	.53	5.4	***6.6	.47	*	5.2	**5.8	.06		6.5	6.6	.00	
Vitesse du Monologue:													
4) Rapide	.07	3.7	3.8	.00		4.1	3.2	.07		4.0	3.6	.00	
Intonation:													
5) Beaucoup	.55	3.1	***5.5	.54	*	3.4	2.7	.01		5.6	5.3	.00	
6) Juste	.70	3.5	***6.0	.65	***	4.0	***2.9	.04		5.9	6.2	.01	
Particulatités de la voix:													
7) Aiguë	.13	3.6	* 4.1	.13		3.6	3.6	.00		4.2	4.1	.00	
8) Douce	.29	3.4	* 4.0	.08	*	3.7	3.1	.02		3.6	**4.6	.19	
9) Peu haletante	.36	3.0	3.5	.07		3.7	***2.2	.29		3.6	3.4	.00	
Particularités de l'individu:													
10) Assuré et détendu	.41	3.0	***4.3	.29		3.6	***2.2	.11		4.2	4.5	.01	
11) Mots coulent sans accrocs	.51	2.5	***4.5	.43	***	3.0	**1.9	.05		4.2	* 5.0	.03	
B. Linguistic Tallies													
12) Canadianisms	.55	6.7	7.8	.07		5.0	***8.9	.41		8.3	6.9	.07	
13) Mispronunciations	.47	0.1	***1.4	.43		0.2	0.0	.00		1.1	1.7	.04	
14) Hesitations	.90	0.1	**0.6	.88	*	0.2	0.0	.00		0.5	0.7	.02	
15) Time for passage	.24	140	***150	.08		150	***126	.15		149	153	.01	

Notes:- 1) This table is comparable to Table 11, which gives the same analysis by speakers' educational levels but for father speakers. Also see Tables 4 and 9 for detailed explanation of symbols.

2) Key for comparison labels:
Un = All speakers with any education beyond high school.
HS = All speakers who have completed high school only.
JH = Speakers who have gone to the 9th grade or further, but haven't completed high school.
El = Speakers with 8 years of education or less.

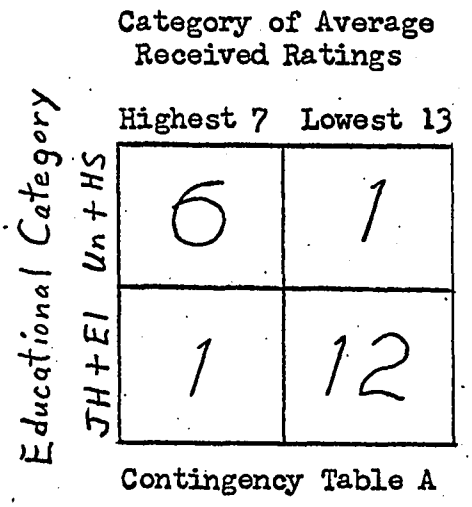
ation (HS), those with more than 9th grade but no graduation (JH), and those with less than 9 years of education (El). In general, the most prominent differences among mother speaker groups are between those with university or high school graduation (Un and HS) and those who have not graduated from high school (JH and El). This was also found to be the major split by education for the speech of father speakers.

In the previous chapter the distribution of fathers on this major educational split was found to correspond closely to their distribution on the AB - CD SES split with only four exceptions, all four of which were over-educated for their SES level. Thus the educational classification placed more father speakers in the upper levels than did the SES classification. However, the general level of education for this sample of mothers is lower than that of their husbands, and the SES classification therefore includes more of them in the upper levels than does the educational classification. Not only do all of the mothers in the C and D groups, except speaker D1, have less education than high school graduation, but also three of the nine speakers in the A and B groups have less than high school graduation (see Table 1, Chapter II). (Notice that mother speaker D1, like her husband, is much more educated than others of their family occupational SES position.)

The speech of mothers with high school graduation or more differs from that of those with less (Un + HS vs. JH + El) primarily with regard to pronunciation accuracy (#2), accuracy of intonation (#6), and fluency (#11). The orderings of speakers on each of these variables fit

Contingency Table A of Figure 28, and the difference between educational group averages accounts for 51% to 70% of the variance in received ratings. The next largest differences between educational categories of mother speakers center around pronunciation accuracy, accent, amount of intonation, and hesitations, which fit Contingency Table B of Figure 28. Notice that accent differs from the other speech variables in that it is just as related to mothers' SES levels (Table 18) as it is to their levels of education.

Figure 28. Contingency Tables for Mother Speakers' Speech Ratings Analyzed According to Their Educational Level Groups

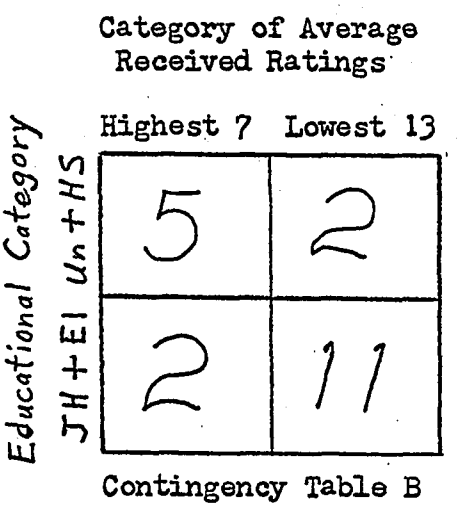


Contingency Table A

(exact test, probability $< .005$)

For speech variables:

#2 accuracy of pronunciation
#6 appropriateness of intonation
#11 fluency



Contingency Table B

(exact test, probability $< .05$)

For speech variables:

#1 articulateness of pronunciation
#3 accent
#5 amount of intonation
#8 hoarseness
#14 hesitations

The educated mothers have higher voices and are not as hoarse as those who are less educated. The relationship seems to be a small one, but according to the theory of Rousey and Moriarty (1965), this indicates that there is more "masculine striving" and "masculine role-taking" among the less educated mothers than among those with high school or more.

The university-educated mothers have the least Canadian -sounding speech, the highest rating on pronunciation accuracy, and the fewest Canadianisms. The high-school-educated mothers use more Canadianisms than any other group, even the least educated, but still they receive the most favorable ratings (even higher than the university-educated mothers) on most of the speech variables that are usually associated with continental speech. The high-school-educated mothers have the most articulate pronunciation, they intonate most and their intonation is the most appropriate, they speak most rapidly, they have the least hoarseness, are least breathy, least nervous, stumble over words the least, and have the fewest hesitations and mispronunciations. The only variable, other than the two that deal directly with accent, on which they are rated less favorably than the university-educated mothers is accuracy of pronunciation (#2), which may be an expression of bias in the linguistic judges who might consider continental pronunciation to be accurate and Canadian to be inaccurate.

With father speakers, breathy, nervous and hoarse speech as well as a lack of articulation and of expressivity were found to be almost invariably linked with a French Canadian accent, but the speech of the high-

school-educated mother speakers is rated more favorably than even those with university education on all of these variables even though they use Canadian pronunciations more than any other mother group in this study! They are not rated as having as much French Canadian accent as the two less educated groups, but this is probably because this indication of accent is very much influenced by articulateness, expressivity and confidence.

It seems that two very different factors enter into the judgment of accent: 1) Canadian as opposed to continental pronunciation, and 2) "laziness," nervousness or inexpressiveness in speech. The work of Gendron (1960, 1966) and that of Boudreault (1967) have indicated, however, that even part of the difference in pronunciation is due to inarticulateness or laziness in pronunciation, indicating that possibly French Canadian pronunciation is not only less preferred but actually inferior on this objective basis to the continental pronunciation. However, the evidence here indicates that at least one group of French Canadians can speak "good" French (articulate, confident, and expressive) that is still definitely Canadian, suggesting that the "best" speech of the French Canadians is not necessarily a copy of continental speech. Gendron's (1966) findings (discussed on pages 69 to 71) that upper class French Canadians try to adopt continental pronunciation were based on male subjects only. The same kind of study should now be carried out using female French Canadian subjects, particularly those with only a high school education.

Lambert (1967) maintains that the French Canadian women are the guardians of the French Canadian culture. Garigue (1962) has made this

same point from his observations, and one of the implications of the educational differences in speech reported here is that some French Canadian women, those with a high school education only, are better guardians than others. It is particularly interesting that the high-school-educated mothers are rated higher on the confidence variables than are those with university training, and even slightly higher than the Continental French mothers (compare Tables 19 and 20). Perhaps the university-educated mothers are unsuccessful in their attempts to adopt a continental mode of speech. It is also possible that the university milieu has made them more self-conscious of their Canadian accent than the high-school-educated mothers who may feel more secure and proud of their Canadian linguistic heritage. For father speakers, the largest number of Canadianisms is also with men in the middle ranges of education (HS and JH, see Table 11), but the father speakers who are highest on the confidence, articulateness and expressiveness variables are those with university education and the more continental type of speech.

French Canadian mothers not only appear to be a stabilizing element in French Canada, because of their preference for French Canadian men and French Canadian values (Lambert, 1967), but also because they seem to be the ones who carry on the values, habits and characteristics of each social stratum from one generation to the next. Support for this notion is found in the high correlation between the occupational SES level of their husbands and that of their fathers (see Table 21). The women's husbands' SES levels correlate .70 with the women's fathers' SES levels, but only

Table 21. Intercorrelations Among SES and Educational Background Characteristics of the Speaker Families

	1)	2)	3)	4)	5)
1) Speaker Family SES (Fathers' Occupations)	-	.75	.62	.42	.70
2) Father Speakers' Educational Levels		-	.80	.54	.81
3) Mother Speakers' Educational Levels			-	.52	.77
4) Father Speakers' Fathers' SES Levels				-	.49
5) Mother Speakers' Fathers' SES Levels					-

.42 with the SES levels of the husband's own fathers, indicating that there is much more upward social mobility among French Canadian men than among French Canadian women.

Table 22 shows that SES level of the fathers of the mother speakers is a very good predictor of the mother speakers' speech performance, accounting for almost twice as much variance as the comparable case for father speakers (compare Table 22 to Table 13). It appears, then, that French Canadian women aren't only less socially mobile than French Canadian men, but their speech patterns (as well as their educational level, Table 21) are much more determined by the SES level of the family into which they are born.

However, as shown in Table 23, the speech patterns of the husband in

Table 22. Linguistic Ratings of Mother Speakers Analyzed According to Their Fathers' Occupational SES Levels

	Groupings According to Speakers' Fathers' Occupational SES Levels								
	total	B vs. CD				C vs. D			
A. Linguistic Ratings	%v	B	CD	%v	X2	C	D	%v	X2
Prononciation:									
1) Articulée, marquée	.40	2.8	**3.6	.10		2.6	***4.0	.30	
2) Juste	.51	3.9	***4.8	.11		3.5	***5.3	.40	
Accent:									
3) Continental	.42	5.7	***6.4	.25		5.7	***6.6	.17	***
Vitesse du Monologue:									
4) Rapide	.00	3.7	3.9	.00		3.8	4.0	.00	
Intonation:									
5) Beaucoup	.53	3.0	***5.2	.39		4.1	***5.7	.14	
6) Juste	.40	3.8	***5.6	.27		4.5	***6.0	.13	
Particularités de la voix:									
7) Aiguë	.09	3.6	4.1	.09	*	3.9	4.2	.00	
8) Douce	.16	3.7	3.8	.00		3.2	**4.1	.16	
9) Peu haletante	.04	3.0	3.3	.00		2.9	3.5	.04	
Particularités de l'individu:									
10) Assuré et détendu	.19	3.0	***4.0	.12		3.4	**4.3	.07	
11) Mots coulent sans accrocs	.28	3.1	***4.1	.08		2.8	***4.6	.20	
B. Linguistic Tallies									
12) Canadianisms	.05	6.5	7.6	.05		7.2	7.8	.00	
13) Mispronunciations	.18	0.7	1.1	.01		0.3	**1.4	.17	
14) Hesitations	.82	0.3	0.5	.06		0.1	**0.7	.76	
15) Time for passage	.11	142	* 149	.02		139	***153	.09	

Note.-This table is comparable to Table 13, which gives the same analysis by speakers' fathers' occupational SES levels but for father speakers. Also see Tables 4 and 9 for detailed explanation of symbols.

Table 23. Linguistic Ratings of Father Speakers Analyzed According to Their Father-in-laws' Occupational SES Levels

A. Linguistic Ratings	Groupings According to Speakers' Father-in-laws' Occupational SES Levels								
	total	B vs. CD				C vs. D			
	%v	B	CD	%v	X2	C	D	%v	X2
Prononciation:									
1) Articulée, marquée	.68	2.8	***4.3	.37	**	3.2	***4.8	.31	*
2) Juste	.87	3.8	***5.5	.55		4.4	***6.0	.32	*
Accent:									
3) Continental	.86	5.8	***6.4	.39		5.9	***6.7	.47	*
Vitesse du Monologue:									
4) Rapide	.01	4.2	3.9	.00		3.6	4.0	.01	
Intonation:									
5) Beaucoup	.40	4.0	***5.3	.19		4.2	***5.8	.21	*
6) Juste	.82	4.3	***5.8	.36		4.4	***6.4	.46	***
Particularités de la voix:									
7) Aiguë	.00	4.7	4.8	.00		4.7	4.9	.00	
8) Douce	.22	3.2	* 4.3	.13		3.8	4.4	.09	
9) Peu haletante	.64	3.0	**3.8	.13		2.6	***4.3	.51	***
Particularités de l'individu:									
10) Assuré et détendu	.56	3.1	***4.4	.16		2.7	***5.1	.40	
11) Mots coulent sans accrocs	.65	3.1	***5.0	.25		3.1	***5.7	.40	***
B. Linguistic Tallies									
12) Canadianisms	.00	7.7	8.8	.00		8.6	8.8	.00	
13) Mispronunciations	.89	0.3	* 1.1	.55		0.6	1.3	.34	*
14) Hesitations	.30	0.5	1.1	.05		0.2	**1.5	.25	
15) Time for passage	.23	146	***165	.06		138	***176	.17	

Note:- This table is comparable to Tables 13 and 23, which give similar analyses but according to speakers' own fathers' occupational SES levels. Also see Tables 4 and 9 for detailed explanation of symbols.

the family are even more related to the wife's father's SES than are the wife's own speech patterns! It is obvious from Table 23 (compare with Tables 9, 11, and 13) that in French Canada one of the best predictors of a man's speech style is his father-in-law's SES level; or stated more directly, one of the primary determinants of whether a young man can marry into an upper SES level is his competence which will be expressed in his speech style.

Falardeau (1953, p. 118) maintains that "if French Canadians were, in the past, reputedly less socially ambitious and mobile than the rest of North America, they are now at the other extreme, in a state close to social nervousness." The low correlation between a man's SES and that of his father (Table 21) suggests that Falardeau's statement might be correct when applied to French Canadian men, but the evidence in this study indicates that French Canadian women are much less socially mobile.

The reasons for the apparent lack of social mobility of French Canadian women may well stem from the patriarchal nature of French Canadian family structure. Garigue (1962) has found from his research that the French Canadian family is very close and very authoritarian, and he maintains that even today if a girl's parents don't approve of her suitor she probably won't marry him. This "gating" function of the parents probably only operates to keep a girl from marrying down, since it's likely that the parents wouldn't mind if she married up. The "gating" function is probably much more important for the woman's parents than for the man's, since a married woman's SES level becomes that of her husband, and there-

fore the most important step her parents can take to make sure she gets ahead is to help her choose the right husband. The more traditional and authoritarian the society, the more prevalent this "gating" function is likely to be.

It seems that the most important consideration is not a young man's father's SES level, but his own apparent potential, since the correlation between the SES levels of the father speakers in this study and that of their fathers-in-law is much greater than the correlation between their fathers-in-law's SES levels and that of their own fathers (Table 21). The "apparent potential" of a young man would be evident in his educational background and his record of past success and accomplishment, all of which, as this study has shown (Chapter III), are reflected in his speech patterns. Thus a man's speech competence is a very good predictor of the SES level he will be permitted by the potential father-in-law to marry into. This is very good evidence for the contention made early in Chapter III (pp. 45-47) that speech competence is a good index of SES since it predicts interaction and acceptance patterns.

There are probably also motives and attitudes of the suitor that keep him from marrying above his potential social level. For one thing he is more likely to court where he has a good probability of success. Those men who are upwardly mobile might try to improve their lot by marrying up, or it may be that they simply marry those who share their values. Whichever is the case, the outcome is the same: they marry into their reference group. It may be, too, that after an upwardly mobile man marries a woman of higher

SES, she teaches him many of the graces and customs and perhaps even encourages or pushes him to get ahead occupationally. The husband may also feel that he must compete or at least compare favorably with her father in occupational success.

It is also plausible that downwardly mobile young men would marry women who share their values, i.e., members of their reference group. After marriage he would pick up many of the working-class customs, habits, and even speech styles from her.

Garigue (1962) also suggests that a French Canadian girl usually looks for someone who is like her father and of equal SES. If this is true, it may be more than an expression of admiration for her father, it may be recognition on her part that the parents will only approve this kind of boy.

In summary, four possible factors have been mentioned that could account for the greater social mobility among men in French Canada than among women: 1) the woman's parents will only approve of suitors who have equal SES (or potentially equal SES) or higher, 2) the man makes his own SES level, whereas the woman marries into hers, 3) the man tends to marry into his reference group, and 4) the woman may seek someone like her father. The adequacy of each of these explanations or some combination of them will have to be determined in future work.

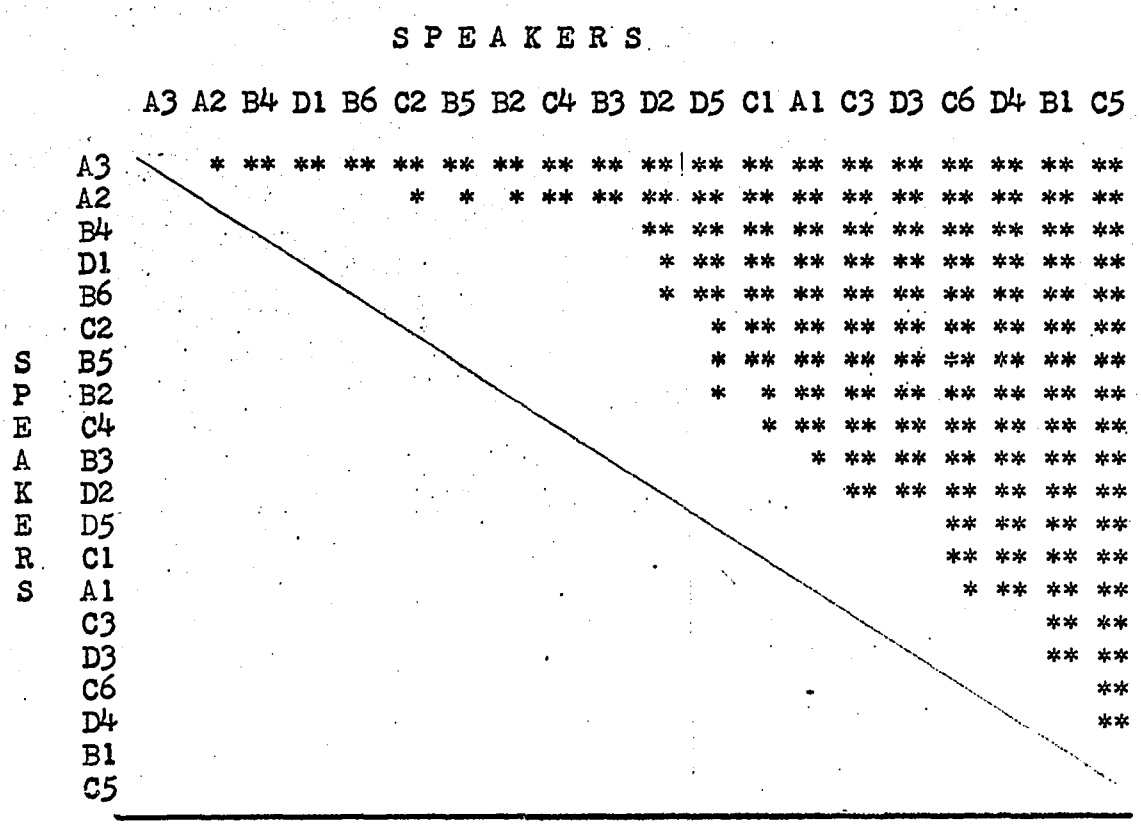
Judgments of Personality Traits and Ability.

The differences between mother speakers on the 15 linguistic variables are almost completely continuous, just as they were for father speakers, and they correspond roughly to the matrix of differences between speakers given in Figure 16 of Chapter III. In spite of the continuous nature of the father speakers' speech characteristics, the raters made a very clear, markedly dichotomous distinction in their judgments of father speakers' personality characteristics. That is, father speakers from the two upper SES categories were rated much higher on the personality dimensions than those from the two lower SES categories (with the exception of those who were over- or under-educated for their SES levels), but the differences within either of these two major groups were negligible.

This dichotomization does not occur in the personality ratings of mother speakers assigned by the young male raters of this study. Figure 29 shows that the differences between mother speakers in their received ratings on intelligente are quite continuous with no major split. Active, belle, courageuse, sûre de soi, ambitieuse, and SES judgment (those that corresponded most nearly to the competence factor in the analysis of father speakers) have similar matrices. The remaining adjectives (which were benevolence adjectives and a combination of competence and benevolence in the perceptions of father speakers) have fewer significant differences between speakers but the matrices are still obviously continuous. (These matrices are not shown.)

If the notion of assimilation and contrast which was put forth to explain the dichotomization in the ratings of father speakers (pp. 72-74) is applied

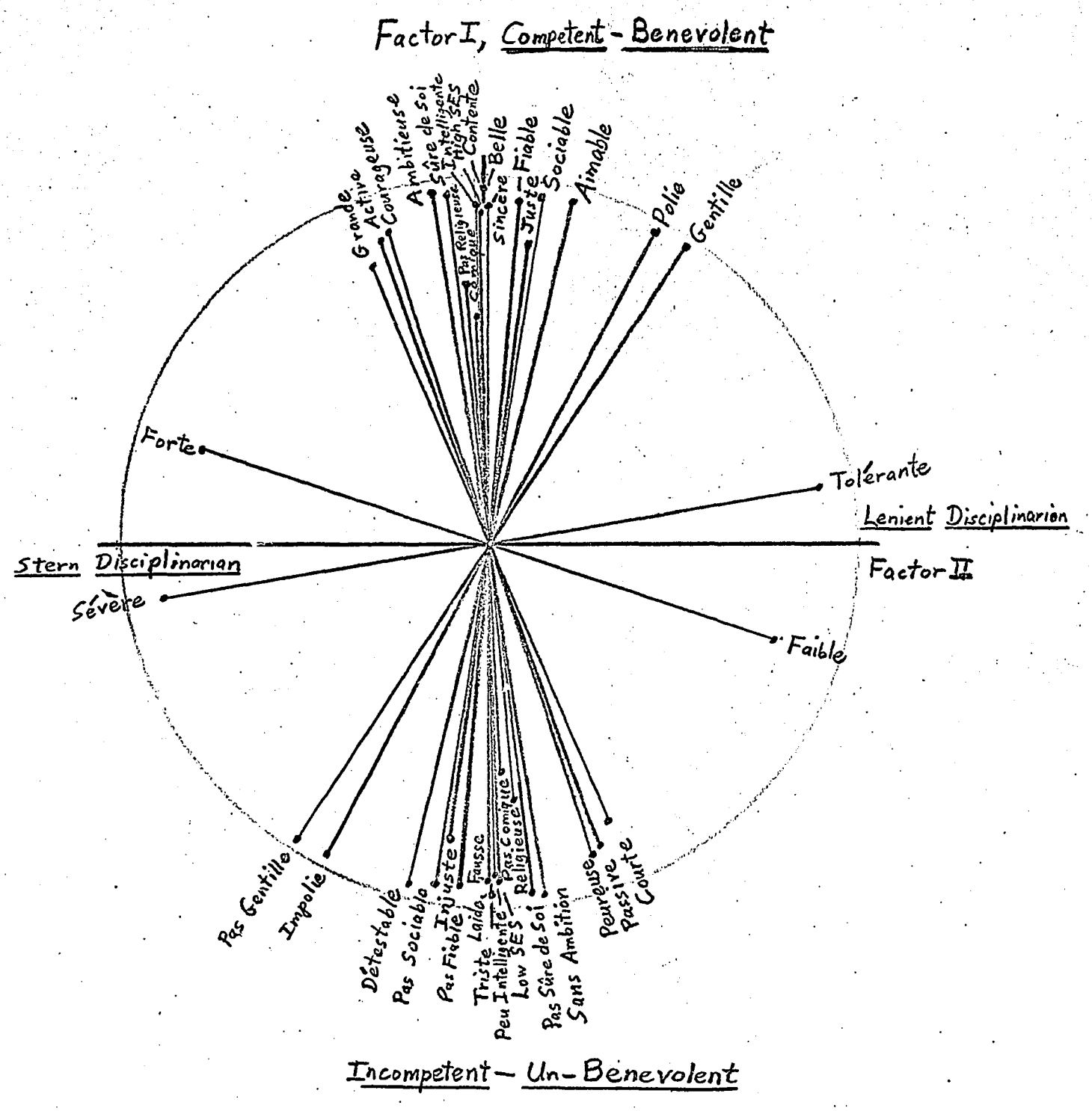
Figure 29. Matrix of Chance Probabilities of Differences Between Each Mother Speaker and Every Other Mother Speaker on Average Received Ratings on the Intelligente Adjective



to the data on mother speakers, one can understand why mothers' voices are not dichotomized, since young male raters would probably not see any of the mother speakers as being very similar to themselves, and would therefore not assimilate in their ratings. (If the same study were carried out with young lady raters, it would be expected that they would dichotomize the mother speakers but not the fathers.) If the explanation given here is correct, the young male raters of this study should be found in Chapter V to dichotomize the son speakers as they did the fathers, since they should be able to identify some as being similar as well as identifying some as different from self.

Implicit personality theory of raters for mother speakers. Figure 30 is the factor analysis pattern for the average ratings received by mother speakers from the total group of 77 raters from the three schools. (Compare to the one shown in Figure 8 for father speakers.) In judging mother speakers' personalities and abilities, the main adjectives that comprised the competence factor for father speakers and the main ones of the benevolence factor are fused in a single factor. That is, those mothers who are seen as being intelligente, sûre de soi, ambitieuse, belle, and high in SES (in general, competent) are also typically seen as being gentille, aimable, and sociable (in general, benevolent). As one of the young boys from School 2 said after they had finished rating the mother speakers, "they are either all good or they are all bad." This is somewhat reminiscent of the pattern found in the preceeding chapter for the ratings of father speakers by raters from School 2. Just as School 2 raters didn't seem to admit the existence

Figure 30. Graph of the Rotated Factor Pattern for the Personality Adjective Ratings Given Mother Speakers by Raters from All Three Schools



in their implicit personality theory of a group of low competence French Canadian men who are high on benevolence, the general trend for raters from the three schools as a whole in their personality theory of French Canadian women seems to be about the same. However, the factor pattern of Figure 30 differs from that of School 2's ratings of father speakers (Figure 19), in that the second factor, which is independent of the competence-benevolence factor, makes much more sense. This second factor is defined by the forte-fiable adjective pair and the severe-tolerante adjective pair, and it seems to indicate that a very important dimension for young French Canadian boys the age of these raters in the judgment of women the age of their mothers is what kind of a disciplinarian each woman is likely to be -- stern or lenient. Although, as shown in Table 24, this factor accounts for only 11% of the variance in adjective ratings by the

Table 24. Percentages of Total Variance in Adjective Ratings of Mother Speakers Accounted for by Each Factor for Each Group of Raters

	Total of all 3 Schools	School 1	School 2	School 3	Linguistic Judges
Factor I	68.79%	43.48%	63.46%	57.66%	51.04%
Factor II	11.27%	32.80%	12.31%	14.55%	20.42%
Total percent of Variance Accounted for by Both Factors	80.06%	76.28%	75.77%	72.21%	71.46%

total group of raters (only slightly more than the variance of two of the twenty adjectives), it seems to be a clear factor conceptually, and, of course, the percent of variance in adjective ratings that a factor can account for is very much determined by the particular selection of adjectives used in the rating process. Although they are much more strongly related to the competence-benevolence factor, gentille and polie are both also slightly related to the lenient end of this "discipline" factor, which also makes sense.

This second factor for these raters is independent of the competence-benevolence one. According to the ratings given by these boys, then, a woman can be a stern disciplinarian and be either high or low on the competence-benevolence dimension, or she can be a lenient disciplinarian and still be either high or low on the competence-benevolence dimension. However, if she is competent[11] she will most likely be benevolent, and if she is incompetent she will probably not be high in benevolence.

It is of interest that this discipline dimension is an important one for young men in the perception of women the age of their mothers while it doesn't emerge in their ratings of men the age of their fathers. They seem to be much more aware of the mother-son role relationship in their perceptions of older women than they are the father-son relationship in perceiving older men, since they bring the stern-lenient discipline dimension into the

---

[11] "Competence" is used here to refer to the combination of intelligente, ambitieuse, sûre de soi, belle, etc. that has been identified earlier as a major dimension of person perception, and "benevolence" refers specifically to the secondary factor that was found to consist of such adjectives as gentille, sociable, aimable, etc.

perception of older women.

In an earlier study (Brown, 1966), it was found that young men are much more accurate in their perceptions of older men than of older women, and the older the stimulus persons were, the greater was this difference. This finding suggests that it is much easier for a young man to put himself in the place of (or empathize with, or identify with) an older man than an older woman. All of these findings together suggest that boys perceive older women only by comparison with their mothers or other older women, whereas they perceive older men at least partly by comparison with self, making it easier for them to perceive older men accurately. This further suggests that they will have greater agreement among themselves in their ratings of older men than those of older women, and, as was found earlier they will dichotomize the ratings of men more because of assimilation and contrast.

Another possible explanation for the use of the stern-lenient dimension in the perception of mother speakers but not in the perception of father speakers may lie in the patriarchal, authoritarian nature of French Canadian families, spoken of by Garigue (1962). It may be that there is very little variance among French Canadian fathers on the stern-lenient dimension. That is, perhaps French Canadian young men perceive all French Canadian fathers as being stern and therefore the stern-lenient dimension only has meaning in the perception of mothers.

Comparisons of personality judgments given by each rater group. Factor analysis patterns for the ratings of mother speakers by Schools 1, 2, and 3

and by linguistic judges are given in Figures 31, 32, 33, and 34 respectively. The pattern for Schools 2 and 3 are most like the general pattern that was found when the data from all schools was combined (Figure 30) in that Factor II in all three cases reflects the discipline dimension. The pattern for the linguistic judges' ratings of mother speakers is very different from that of School 2 or School 3 or the general pattern for the three schools, but very similar to the patterns that were found in the perception of father speakers. It appears that the linguistic judges are judging mothers on the same two dimensions, competence and benevolence, that were used in the perception of father speakers. This isn't too surprising since two of the linguistic judges were women, and also the two male linguistic judges are older than the young men from the three schools; thus the discipline (mother-son relationship) dimension probably isn't as salient for them in their perception of mother speakers. The ratings of mother speakers by linguistic judges differ from their ratings of father speakers in that benevolence in their perception of mother speakers is a unitary dimension, whereas it was differentiated into two kinds in their perception of father speakers, as shown in Figure 26 and the accompanying explanation on pages 121 to 125. (Further analyses of this same data could be useful. For example, the differences in rating style between the male linguistic judges and the female ones could be very important in understanding the same-sex or other-sex person perception as discussed here.)

The factor pattern for School 1 seems to be a combination of the ones for the other two schools and that for linguistic judges. Tolérante and

Figure 31. Graph of the Rotated Factor Pattern for the Personality Adjective Ratings Given Mother Speakers by Raters from School 1

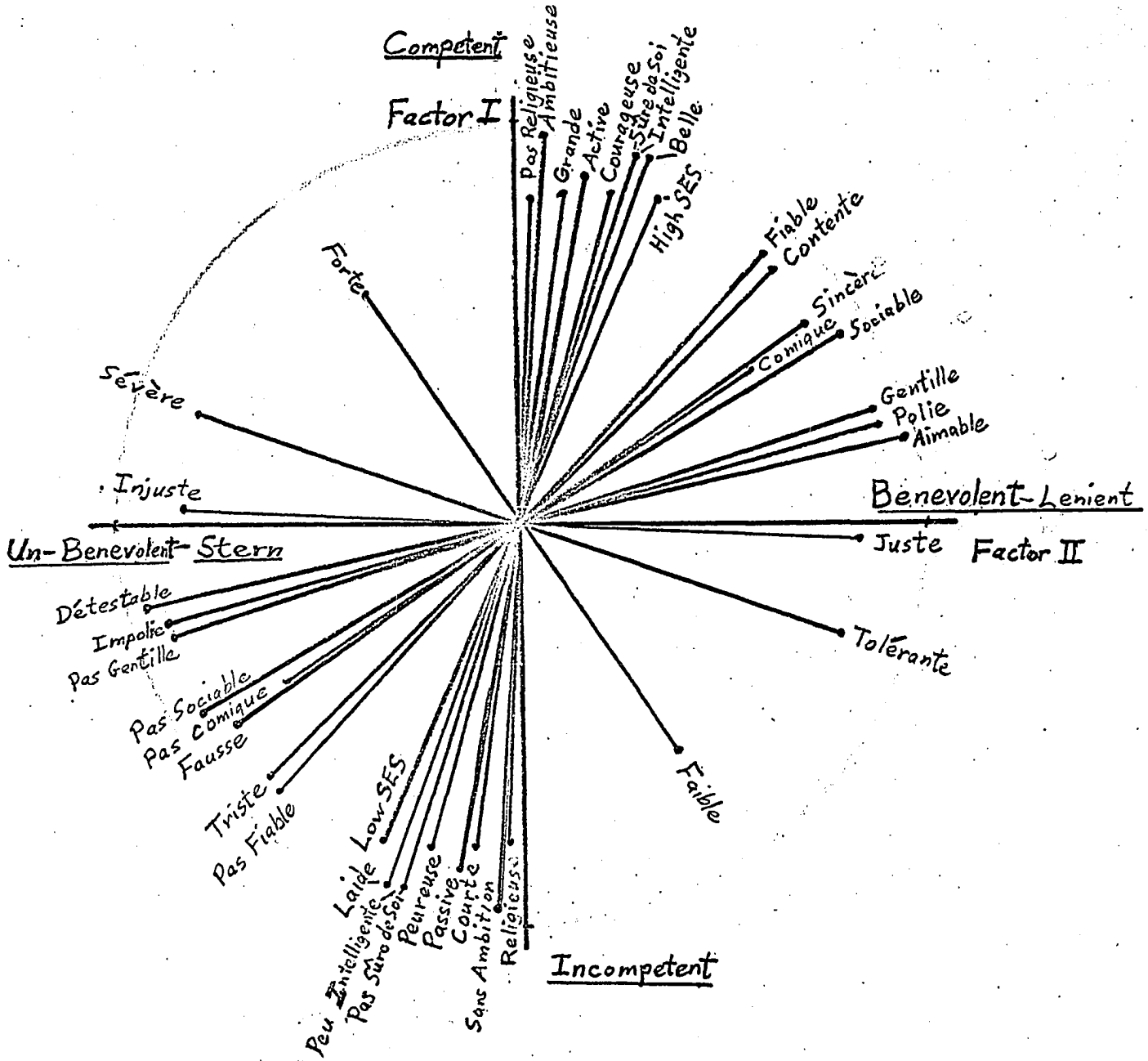


Figure 32. Graph of the Rotated Factor Pattern for the Personality Adjective Ratings Given Mother Speakers by Raters from School 2

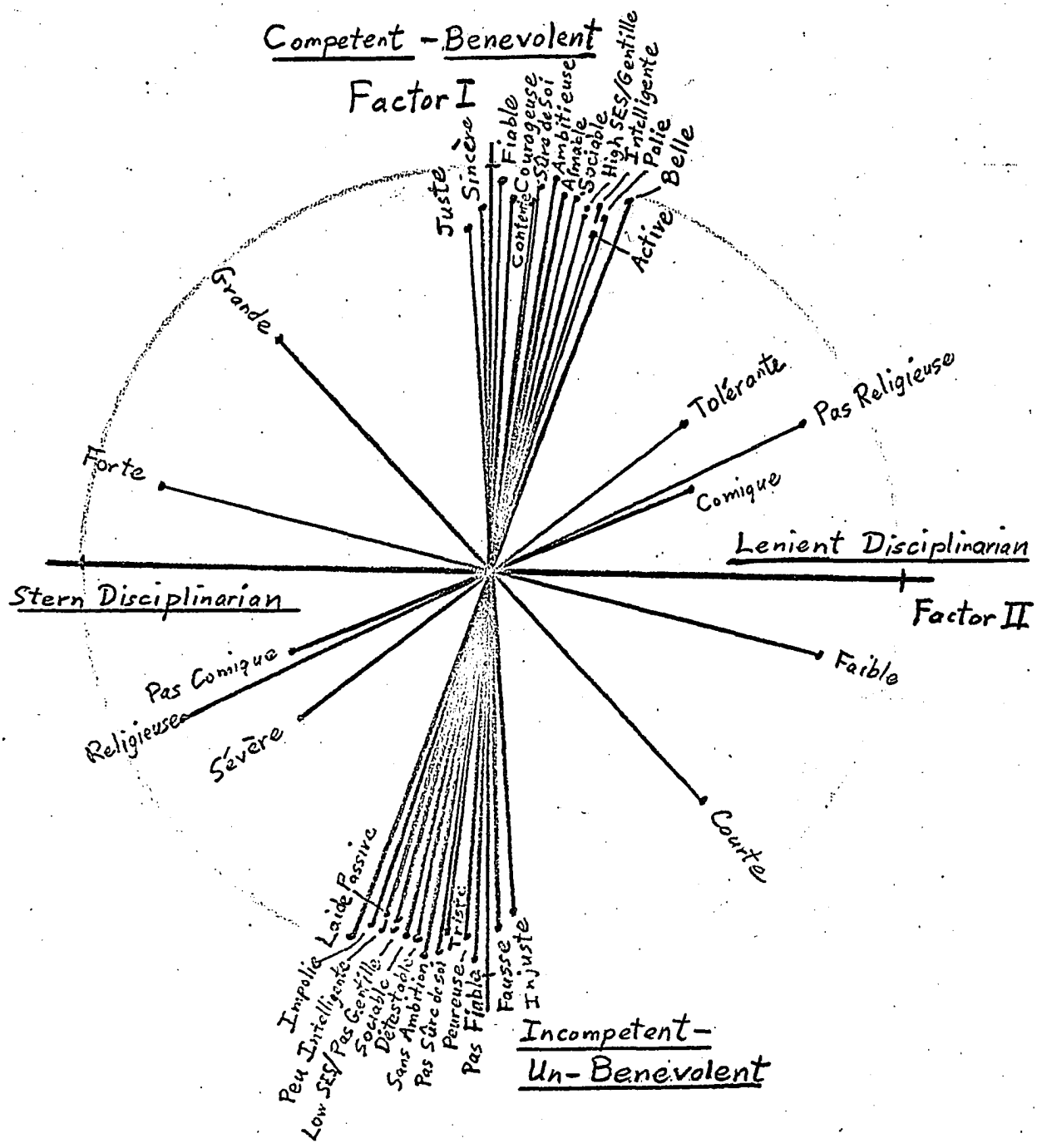


Figure 33. Graph of the Rotated Factor Pattern for the Personality Adjective Ratings Given Mother Speakers by Raters from School 3

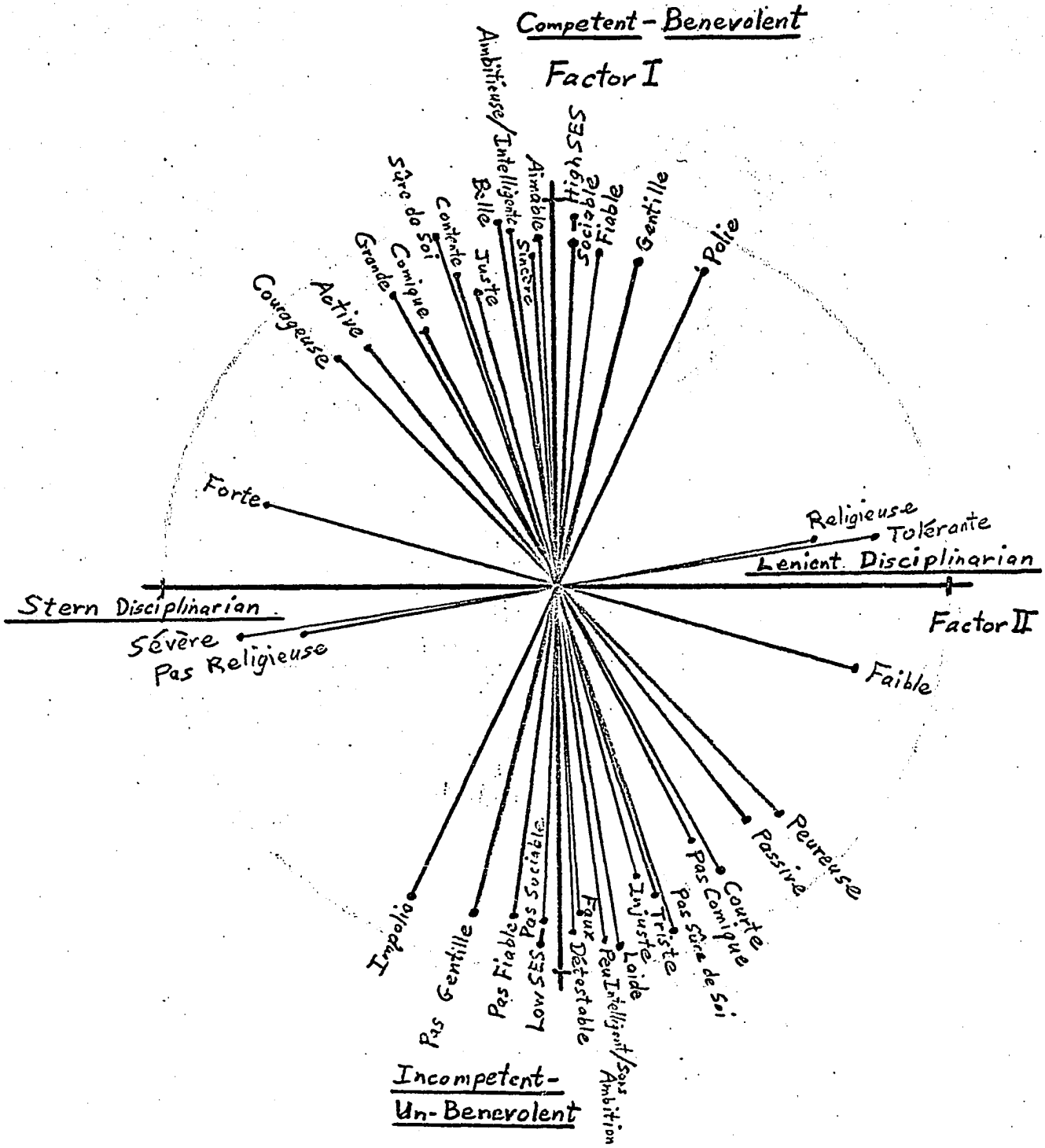


Figure 33. Graph of the Rotated Factor Pattern for the Personality Adjective Ratings Given Mother Speakers by Raters from School 3

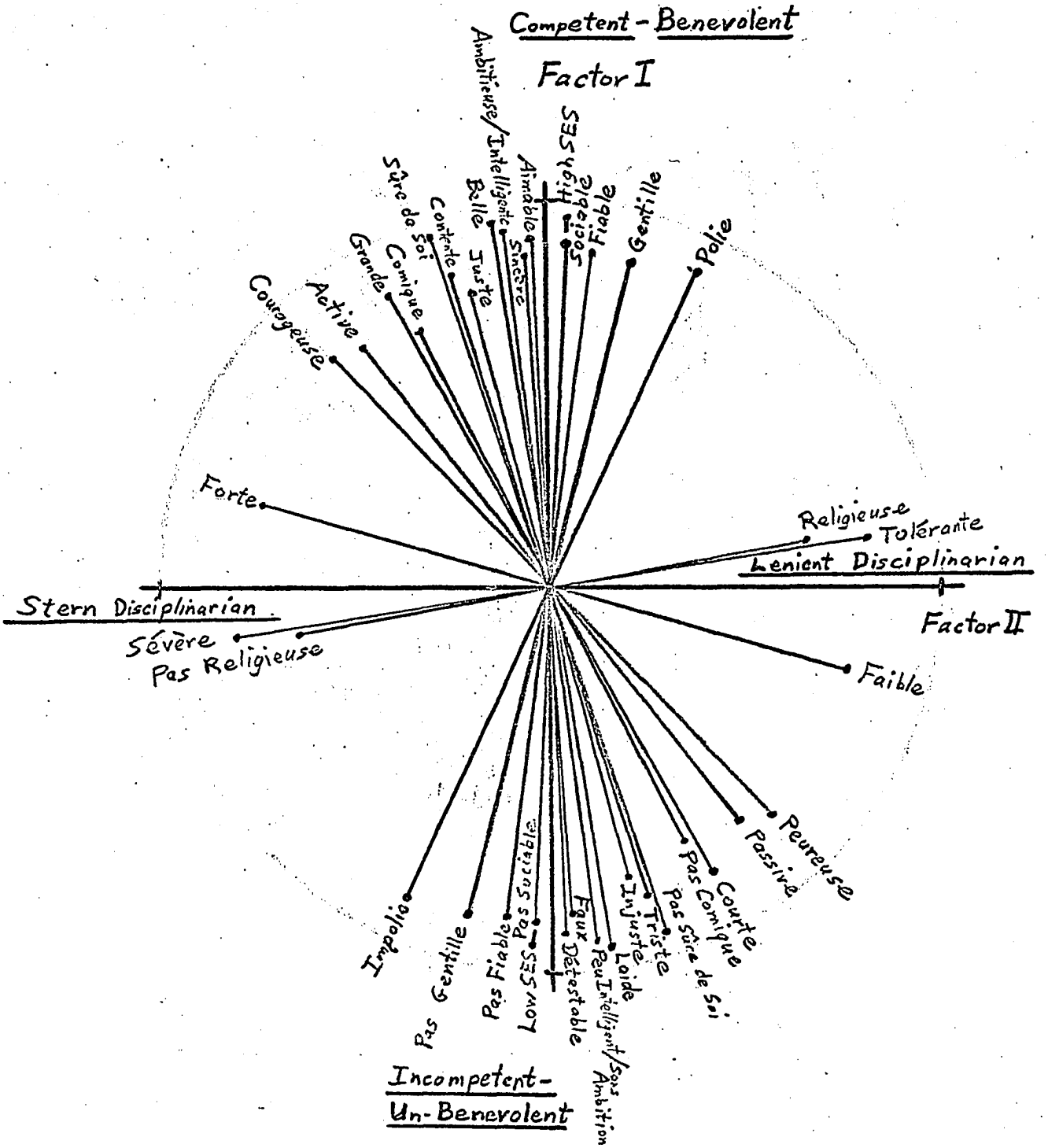
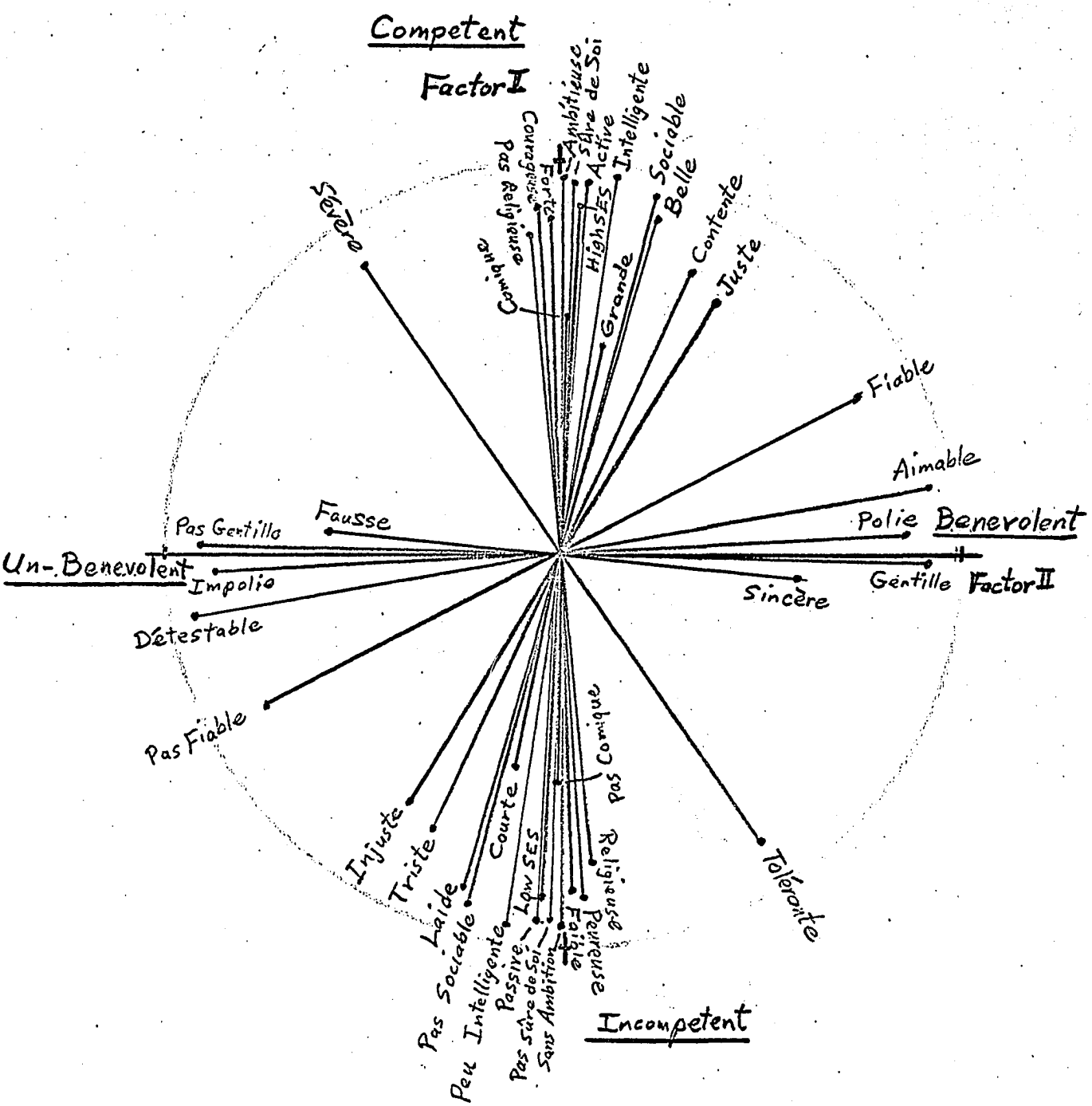


Figure 34. Graph of the Rotated Factor Pattern for the Personality Adjective Ratings Given Mother Speakers by the Linguistic Judges



faible (the opposite of forte) are associated with each other, and tolérante corresponds closely to the vector for Factor II (although faible corresponds more closely to the competence factor than to Factor II, with the competent mothers being seen as forte and the incompetent ones as faible.) The benevolence adjectives (gentille, aimable, sociable, polie, sincère, etc.) are not combined into the first factor in School 1's ratings as they are in the ratings by the other two schools. They are more closely related to Factor II for School 1, just as they are in the ratings of mothers by linguistic judges and also in the ratings of fathers. Factor II for School 1 raters, then, could be called a "benevolence-discipline" factor. (Notice from Table 24 that the inclusion of the benevolence adjectives as well as the discipline ones in Factor II for School 1 causes this factor to account for much more variance in adjective ratings than the second factor of the other groups.)

The pattern of ratings for School 1 seems to approach that of the more mature linguistic judges in that there is relatively less emphasis placed on the discipline dimension of relationships. When rating father speakers, School 1 judges also seemed to show a higher degree of maturity than did those from the other schools in that they attributed high benevolence to SES groups other than their own, whereas the others didn't.

Although Schools 2 and 3 are similar in their rating patterns in that the second factor for both of them reflects primarily the discipline dimension, they differ in the way they combine adjectives for this dimension. For School 3 the lenient mothers are tolérante, faible (weak), and religieuse,

whereas for School 2 they are tolérante and faible, but pas religieuse. School 1 raters consider the religieuse adjective to be independent of the benevolence-discipline factor, but highly and negatively related to the competence factor. The complete disagreement between Schools 2 and 3 on the religieuse adjective cause it to be unrelated to the discipline factor in the pattern for the total group of raters (Figure 30), and although religieuse corresponds closely to the competence factor in the total pattern, it is not highly related to it. (In other words, religieuse has a relatively low amount of common variance with this factor pattern for the combined ratings of all groups of boy raters.)

Religieuse proves to be a very interesting personality dimension, in that, more than any other, it seems to be an idiosyncratic judgment with each rater group using it in a different way. Putting the results of this section together with those from the final section of Chapter III, it seems that for School 3, religious adult males are benevolent and may be either high or low on competence, and religious adult females are lenient disciplinarians and may be either high or low on the combined competence-benevolence dimension. School 2 raters see religious adult males as being slightly less competent than unreligious ones, and religieux is almost perfectly independent of the benevolence adjectives for them. (The analysis is complicated by the high correlation between competence and benevolence in the ratings by School 2.) They consider religious adult females to be stern disciplinarians and slightly less competent and benevolent than unreligious ones. School 1 raters seem to agree with those from School 3 that religious

adult males are benevolent and can be either high or low on competence. For School 1 raters, religious adult females are markedly less competent than unreligious ones (with religieuse corresponding almost perfectly, although in a negative relationship, with the competence factor), although they may be either high or low on the combined benevolence-discipline dimension. For linguistic judges religiousness is primarily a matter of incompetence for adult males as well as for adult females, and it is practically unrelated to benevolence in both cases.

Although the competence factor in the ratings of mother speakers is different for Schools 2 and 3 than it is for School 1 and the linguistic judges (in that Schools 2 and 3 include benevolence in it), Table 25 shows that there is quite a high degree of agreement among rater groups in their ratings of speakers on this dimension. This suggests that perhaps the same

Table 25. Intercorrelations Among Mother Speakers' Factor Scores Received from Each of the Rater Groups

		Intercorrelations Among Scores on Factor I			Intercorrelations Among Scores on Factor II			
		Rater Groups				Rater Groups		
		School 2	School 3	Linguistic Judges		School 2	School 3	Linguistic Judges
Rater Groups	School 1	.85	.77	.88	School 1	.05	.41	.43
	School 2		.85	.77	School 2		.21	-.18
	School 3			.73	School 3			.27

linguistic cues that signal competence for both School 1 and the Linguistic judges signal both competence and benevolence for Schools 2 and 3. On the other hand, there is very little inter-group agreement on the second factor of personality judgment, even between the raters from Schools 2 and 3, who both use the same dimension (discipline) for Factor II. The inter-group agreement is considerably less for the second factor of mother speakers than it was for father speakers (see Table 16), and it seems that it will be very difficult to find the linguistic basis of judgments on this dimension.

Personality Judgments as Related to Background Variables

Of the five background variables uses in this study, (a) family SES level, (b) educational level of the father in the family, (c) educational level of the mother, (d) father's father's SES, and (e) mother's father's SES, the only one that should be expected to be directly related to the competence level of mother speakers is number two, their own educational level. As noted in the first section of this chapter, the educational level of the mother speakers was the background factor which was found to be most related to their speech patterns. It seems likely that educational level of the mother speakers would also be the best predictor of their received personality ratings.

Table 26 shows the average personality ratings received by each educational level group of mother speakers on each adjective, as well as the significance levels of differences between averages. Also included in this table is the comparison of mother speakers from France with the upper SES level mother speakers from Canada. On Comparison 1, the comparison of all speakers with high school or more (Un + HS) with all those with less than high school (JH + El), the differences between group averages exceed chance level on all of the adjectives except forte, one of the main adjectives of the discipline dimension. (The difference on tolérante, the other main discipline adjective barely reaches significance with only 8% of the variance accounted for by that comparison.) The only adjective (of those that reach significance) on which the less-than-high-school-educated group is rated higher is religieuse.

Table 26. Personality Ratings of Mother Speakers Analyzed According to Speakers' Educational Levels and Countries of Origin

	Upper-class French vs. Upper-class French Canadians			Groupings According to Speakers' Educational Levels											
				total	Comparison 1			Comparison 2				Comparison 3			
	French A+B		%v X2	%v	Un&HS	JH&El	%v X2	Un	HS	%v	X2	JH	El	%v	X2
Husband's SES	2.8	***3.7	.38	.44	3.5	***4.4	.40 ***	3.7	***3.3r	.04		4.4	4.4	.00	
Intelligente	2.2	***3.5	.34	.36	3.3	***4.4	.31	3.6	***3.0r	.03		4.5	**4.3r	.01	
Active	2.2	***3.3	.31	.21	3.1	***3.7	.09	3.4	***2.8r	.03		4.0	***3.3r	.09	
Juste	3.2	***3.6	.31	.26	3.6	* 3.8	.10	3.7	**3.4r	.13		3.7	3.9	.03	
Sincère	2.6	***3.0	.18	.49	3.0	***3.4	.18	3.4	***2.6r	.31		3.4	3.4	.00	
Belle	2.2	***3.8	.42	.26	3.6	***4.5	.23	3.9	***3.4r	.03		4.5	4.5	.00	
Comique	4.0	***4.5	.33	.20	4.4	* 4.6	.04	4.5	4.3	.03		4.8	**4.4r	.13	
Courageuse	3.7	***4.2	.14	.36	4.2	**4.4	.05	4.5	***4.8	.17		4.6	***4.1r	.14	
Sûre de soi	3.1	***3.9	.13	.39	3.7	***4.8	.27 *	4.1	***3.2r	.09		5.0	***4.5r	.03	
Aimable	2.5	***3.2	.48	.43	3.1	***3.5	.33	3.2	**2.9r	.08		3.6	3.4	.02	
Fiable	2.7	***3.2	.27	.46	3.1	***3.5	.22	3.4	***2.8r	.24	*	3.5	3.5	.00	
Sociable	3.0	***3.5	.18	.51	3.4	***3.9	.32 *	3.6	***3.1r	.12		4.0	**3.7r	.07	
Grande	4.2	4.3	.00	.25	4.3	***4.7	.20	4.4	4.1	.02		4.7	* 4.5r	.03	
Ambitieuse	2.3	***3.4	.39	.38	3.3	***4.0	.32	3.4	* 3.1r	.02		4.1	**3.8r	.04	
Tolérante	4.2	4.2	.00	.12	4.1	* 4.3	.08	4.2	4.0	.04		4.3	4.3	.00	
Gentille	2.6	***3.1	.28	.39	3.0	***3.5	.31	3.2	**2.8r	.08		3.5	3.4	.00	
Pas religieuse	4.3	***3.6r	.70	.46	3.6	**3.4r	.19	3.8	**3.3r	.27		3.4	3.3	.00	
Forte	3.7	3.6	.02	.26	3.6	3.5	.00	3.8	**3.3r	.21		3.5	3.3	.05	
Polie	3.0	***3.6	.24	.37	3.5	***4.0	.24 ***	3.8	***3.2r	.13		4.0	4.0	.00	
Contente	2.8	***3.4	.19	.28	3.3	**3.6	.08	3.6	**3.1r	.11		3.7	**3.4r	.09	

In general, mothers' educational levels account for less variance in the ratings of mother speakers than fathers' SES levels did in the ratings of father speakers (compare Tables 4 and 26). Also, fewer of the contingency tables are significant, indicating that the ordering of received ratings is not predicted as well for the mothers by the best predictor, i.e., their educational levels. The contingency tables for twelve of the twenty adjectives were significant for father speakers on the gross SES split, whereas only four are significant for mother speakers on the gross educational split. Polie and rating of the mothers' SES levels are the two characteristics with the most predictable ordering, and they fit Contingency Table A of Figure 28. Sûre de soi and sociable are the other two that have significant contingency tables, and they fit the one shown in Part B of Figure 28.

The strongest impression for the comparison of mothers with high school education or more in contrast to those of less than high school education is that they are more polie, of a higher SES level, more sûre de soi and more sociable than those with less than high school. The second impression, which is not quite as strong, is that they are less religieuse and they are in general more competent and benevolent than those of less than high school education. There seems to be little difference on the adjectives of the discipline factor, although the more educated are somewhat less sévère. It seems that the educational level of mother speakers is related more to the adjectives of the competence-benevolence factor than to those of the discipline factor.

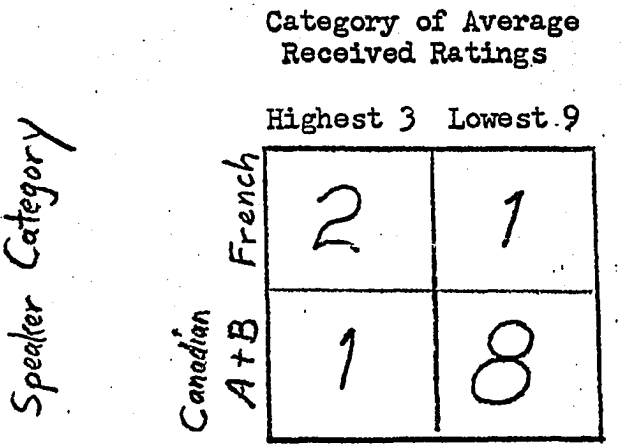
The second comparison according to education, those with university as compared to those with only high school, was found in the analysis of speech patterns (the first section of this chapter) to favor those with only high school. Although they used more typically Canadian speech as far as pronunciations are concerned, they were judged more favorably than the university-educated mothers on almost every other speech variable. Table 26 shows that they are also rated more favorably than the university-educated mothers on most of the personality adjectives. Although on most of the adjectives only a small amount of variance is accounted for by this comparison, on some, like sincère, fiable, religieuse and forte, between 20 and 30 percent of the variance is accounted for. Notice that the high-school-educated mothers are not as forte as the university educated ones, but they are more religieuse. Religieuse is particularly interesting since it was proposed in the first section of this chapter that the high-school-educated mothers are more conscientious guardians of the French Canadian culture than are those with university training, and Garigue (1962) has pointed out that French Canadian women are the ones who take the responsibility for perpetuating their culture and religion.

It is interesting in the third comparison that those with less than 9th grade education (El) are rated more favorably than those with 9th grade (JH) on intelligente, active, comique, courageuse, sûre de soi, sociable, grande, ambitieuse and contente, even though they are not judged significantly more favorably on any speech variable (Table 20) and they actually receive a less favorable judgment on one speech variable, fluency (#11).

The mother speakers from France are rated more favorably than those from Canada on all personality adjectives except four. On three of the four, grande, tolérante and forte, there is no sifnificant difference, and on the fourth, religieuse, the Canadians are rated significantly higher than the mothers from France. In general, the Continental vs. Canadian comparison for father speakers accounted for more variance in the adjective ratings (Table 7) than it does for mother speakers. In order for the contingency tables to be significant, the ordering of speakers according to this comparison must be perfect, since there are only 3 speakers from France. Four of the contingency tables for the adjective ratings of father speakers were significant for this comparison of speakers from France with speakers from Canada while none are significant for mother speakers. However, over half of the adjectives (generally those that account for the most variance) for the Continental-Canadian comparison of mother speakers fit the contingency table of Figure 35, with only one speaker misplaced from each group.

In most of these comparisons, F2 is the continental speaker who is ordered lower than some Canadian speakers, although in some cases it is F3, but it is never F1. F1 is consistently rated higher than all other speakers on almost every adjective. The popularity of F1 is not just a characteristic of the combined ratings of the groups, but she is rated highest in competence and among the highest in benevolence and leniency of discipline by each of the three schools. (See F1's position in the factor score plottings for each rater group given in Figures 36 to 40.) This is particularly inter-

Figure 35. Contingency Table for Some of the Adjectives in the Comparison of Continental French Mother Speakers with Upper-class Canadian Mother Speakers



(exact test, not significant)

This table applies to the adjectives intelligent, active, juste, belle, sincère, comique, sûre de soi, aimable, fiable, ambitieuse, religieuse, and forte for the comparison of Continental French mother speakers with upper-class French Canadians.

esting since the raters seem to have a difficult time agreeing on the ratings of most other speakers. The differences between speakers in the degree to which people agree in ratings of them may turn out to be an important personality variable.

Other background variables. The personality ratings of mother speakers, when analyzed according to the SES level of each mother speaker's father, give approximately the same results as those for the analysis by mother speakers' educational levels (Table 26). Some adjectives like gentille, belle, and intelligente seem to be slightly more related to the mother speakers' fathers' SES, while others, like sociable are slightly

Figure 36. Plotting of Each Mother Speaker According to Her Factor Position Received from the Total Group of Raters

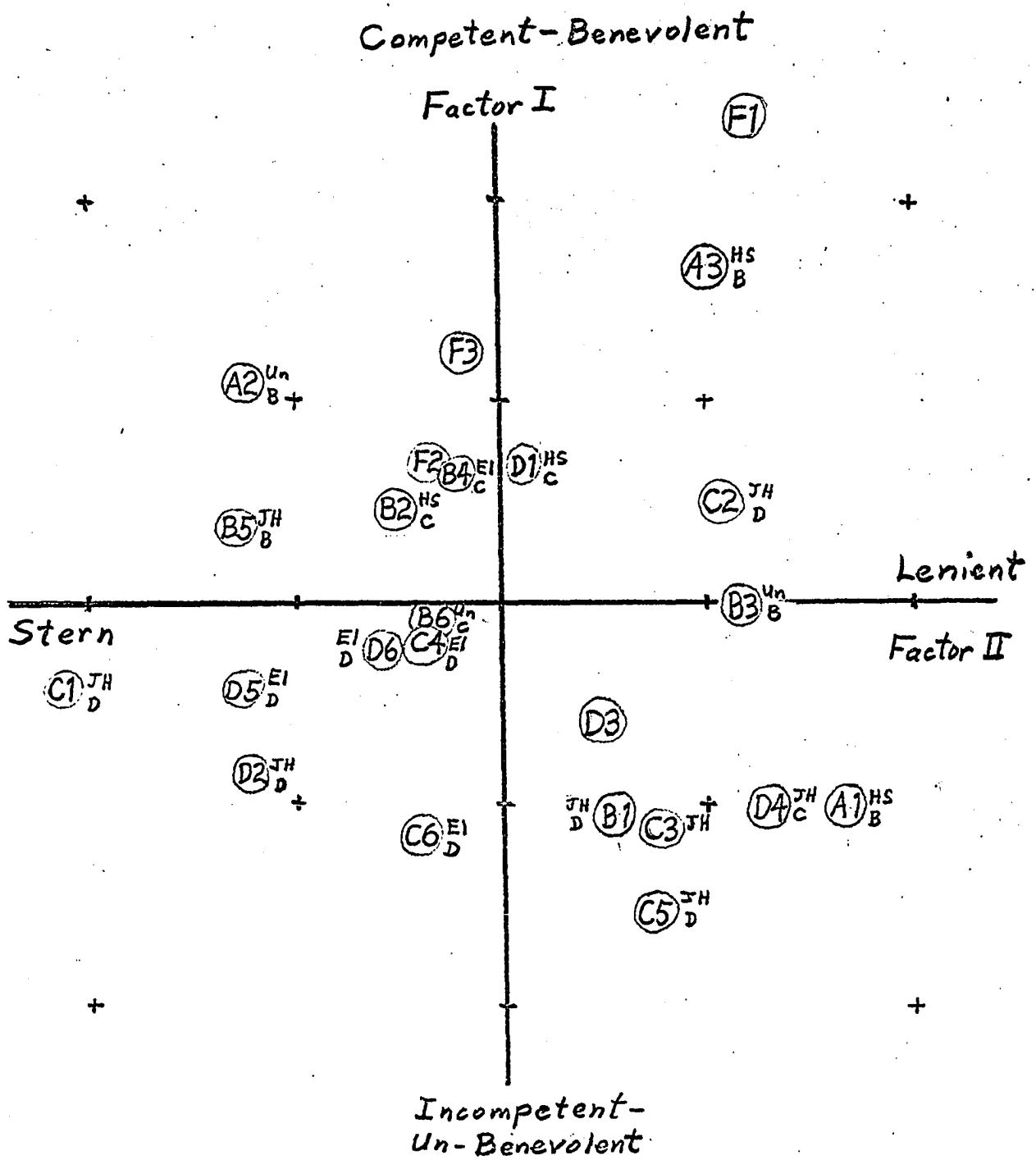


Figure 37. Plotting of Each Mother Speaker According to Her Factor Position Received from School 1 Raters

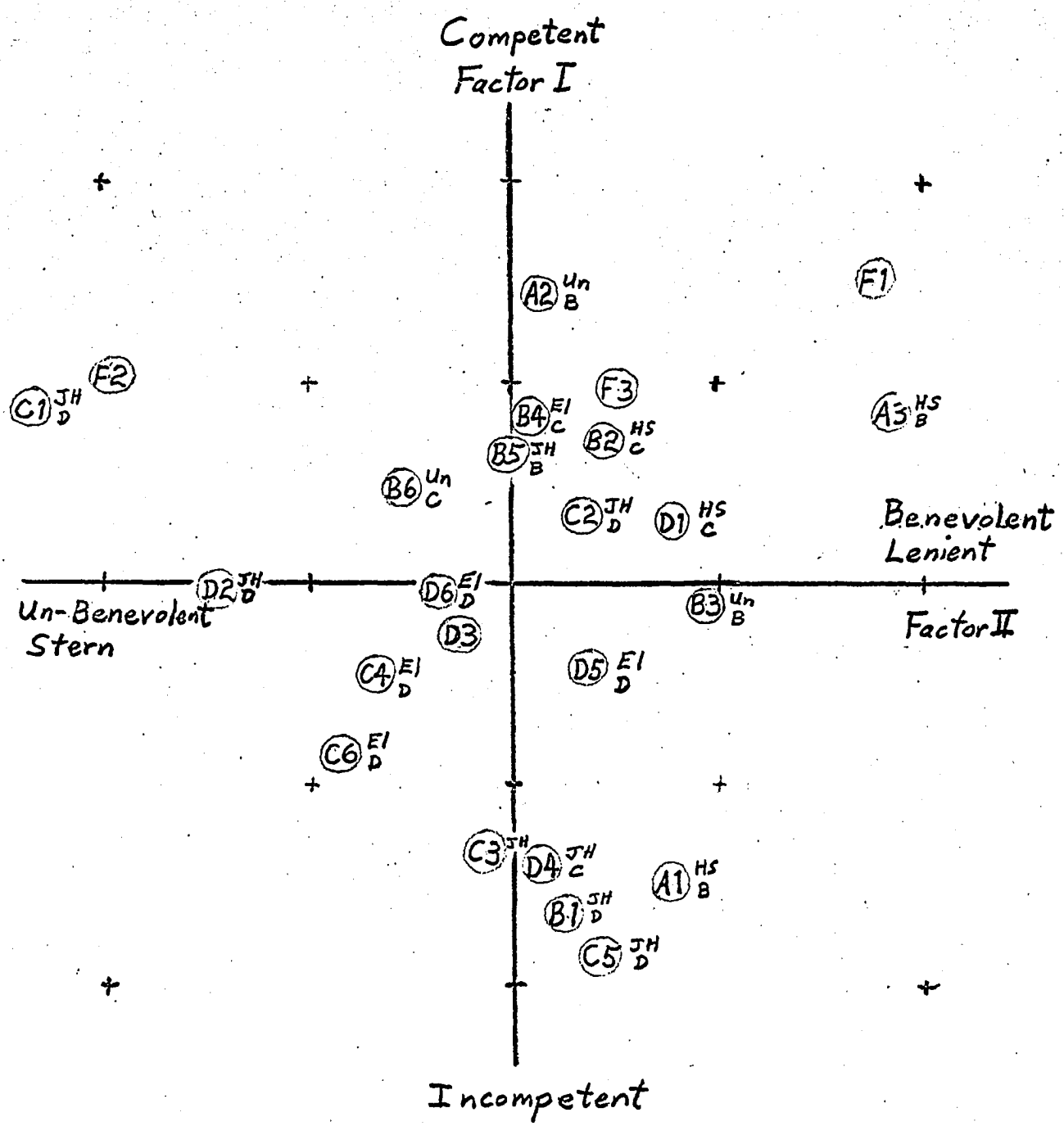


Figure 38. Plotting of Each Mother Speaker According to Her Factor Position Received from School 2 Raters

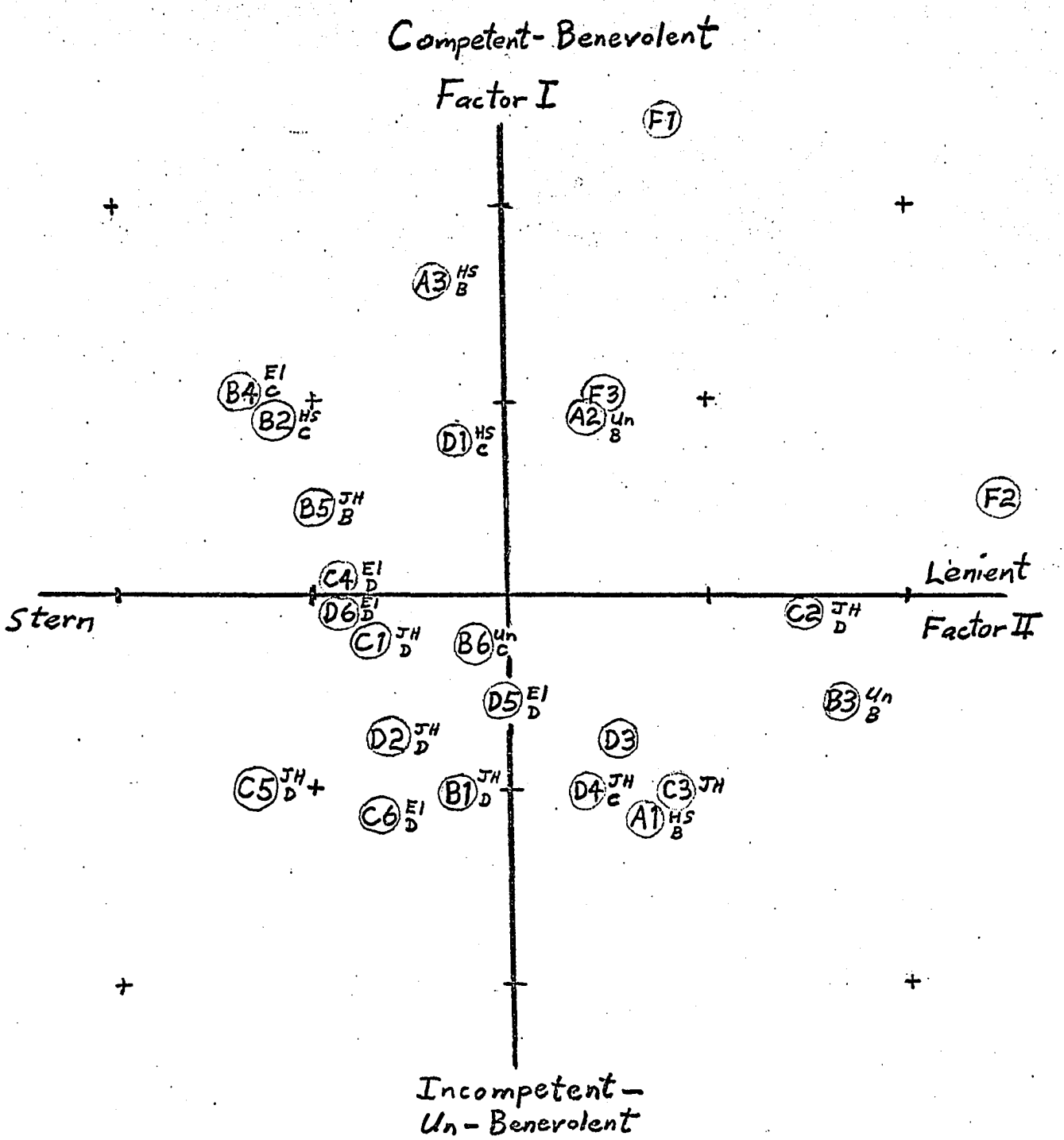


Figure 39. Plotting of Each Mother Speaker According to Her Factor Position Received from School 3 Raters

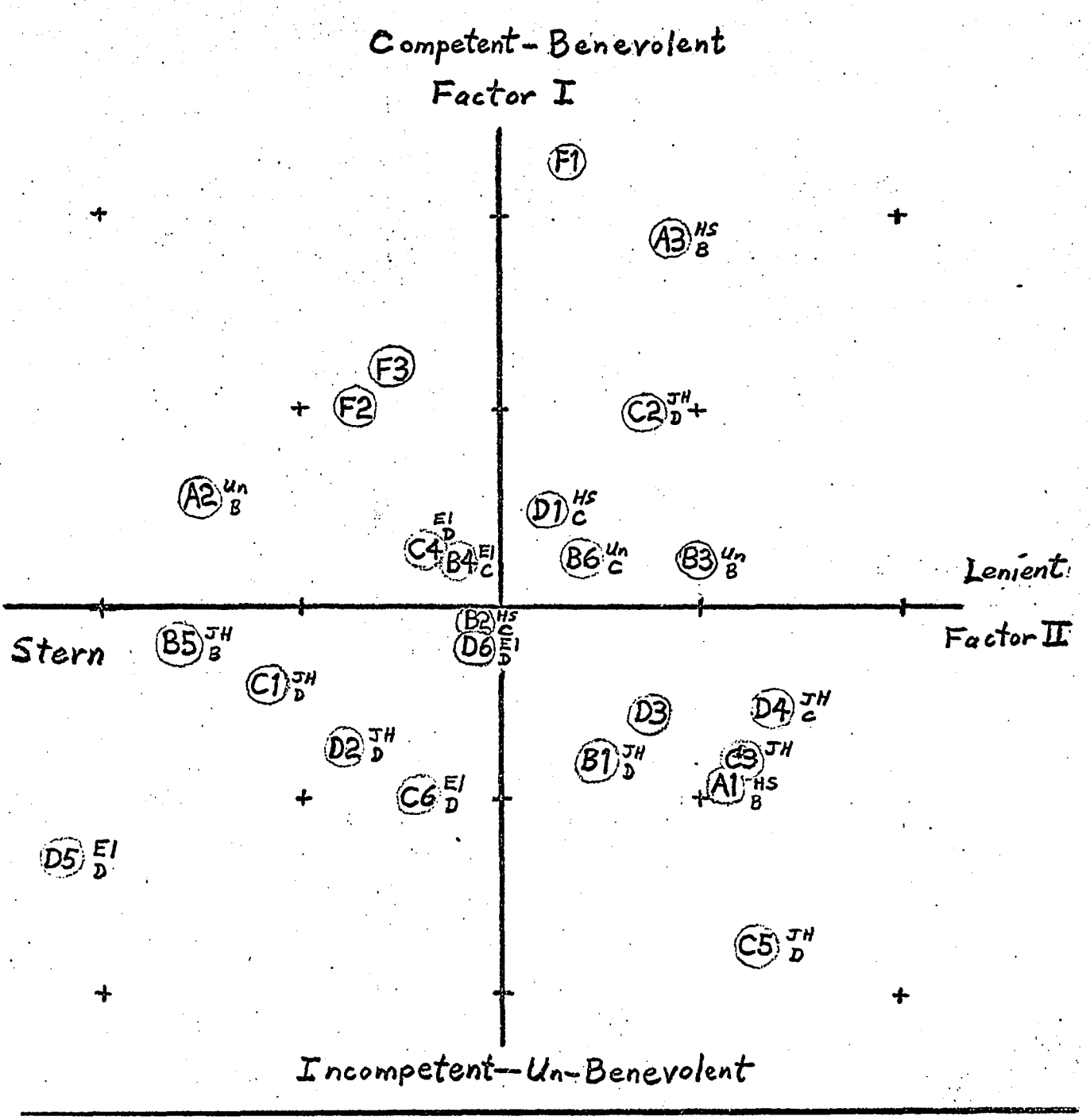
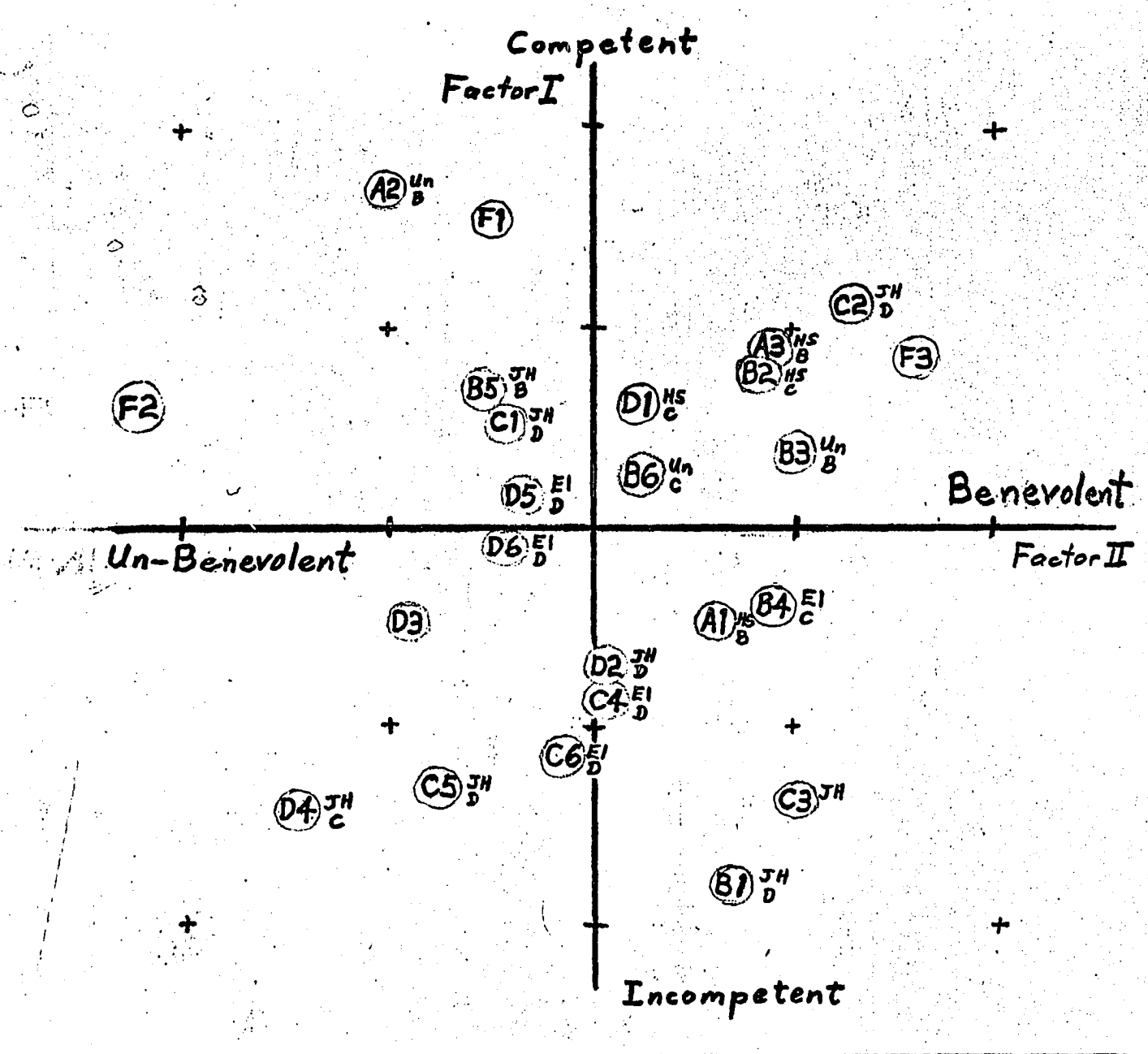


Figure 40. Plotting of Each Mother Speaker According to Her Factor Position Received from Linguistic Judges

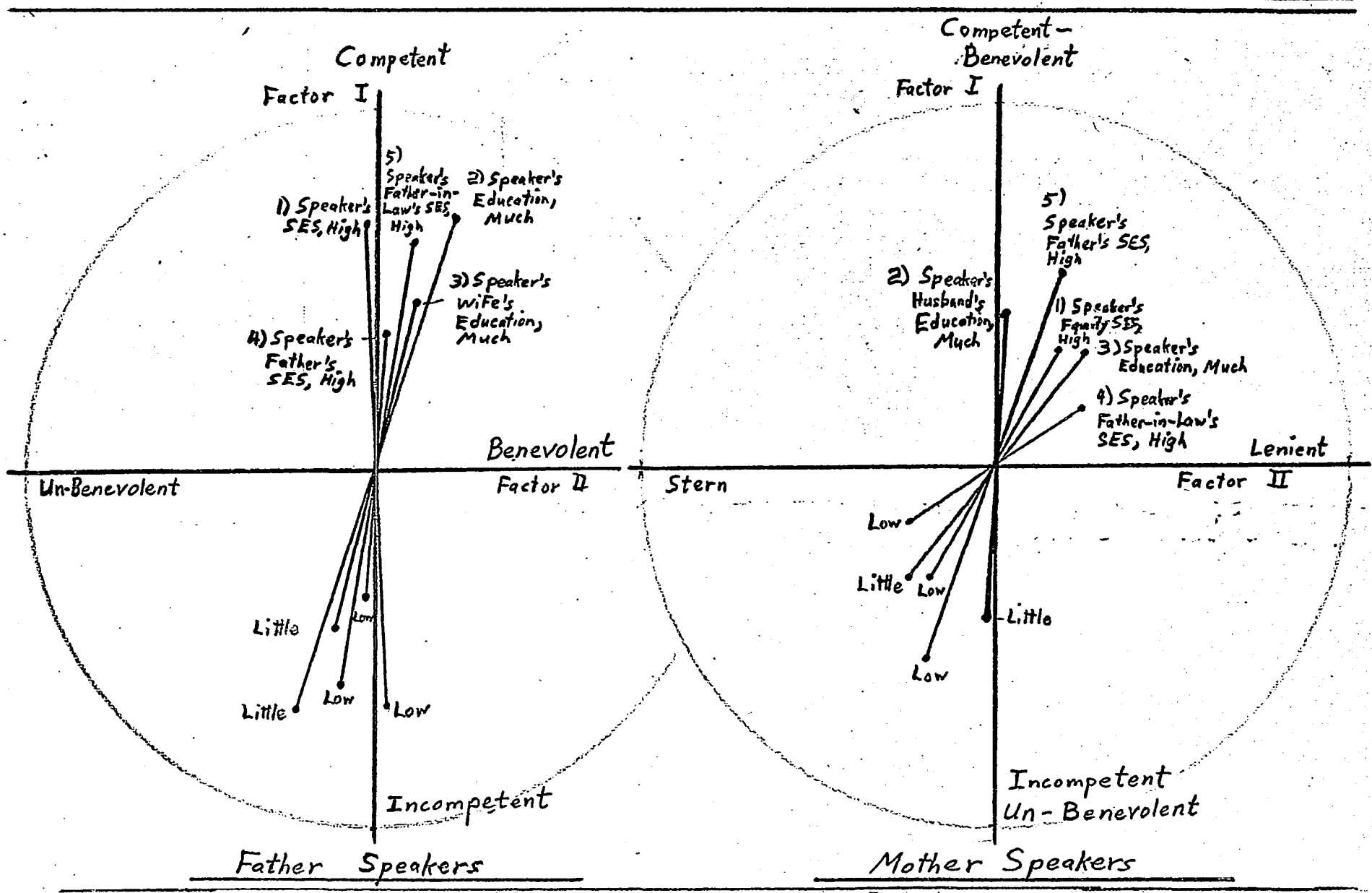


more related to mothers' education, but the two background variables are about equally good as predictors of personality ratings. Actually these two background variables are quite highly correlated with one another (.77, see Table 21) and therefore they give somewhat redundant information about the mother speakers.

Figure 41 shows how each of the background variables is related to the competence and benevolence factors for father speakers and the competence-benevolence factor and the discipline factor for mothers. None of the background variables is even moderately correlated with either of the second factors (benevolence for fathers or discipline for mothers). The competence ratings of fathers are more related to their SES level (#1) than are the competence ratings of mothers, which would be expected since the SES level of the family depends much more on the abilities of the father than those of the mother. However, fathers' competence ratings are also much more related to their own educational levels (#2) than are the competence-benevolence ratings of mother speakers to their own educational levels (#3). Part of the reason for this is that the high-school-educated mothers were actually higher on almost all of the adjectives than were those of university education, and therefore much of the predictive usefulness of mothers' educational levels wouldn't show up in linear correlation. This also explains why mother speakers' fathers' SES (#5) is correlated more highly with the competence-benevolence personality factor for mothers than is their education.

Mother speakers' competence ratings are more related to their fathers'

Figure 41. Graphs of the Correlations Between Background Variables and Factor Scores for Father Speakers and for Mother Speakers



SES levels than father speakers' competence ratings are to their fathers' SES levels. This is probably another expression of the greater social mobility among French Canadian men than among French Canadian women. However, the competence ratings of father speakers are very highly related to their father-in-law's SES (#5), almost as highly correlated as they are to their own SES or educational levels (#1 and #2). This is still another expression of the lack of social mobility among French Canadian women, since they seem to be marrying men who are very similar in social class level and interpersonal competence (as indicated by ratings from voice) to their fathers. An explanation of some possible mechanisms by which this could operate was also given in the first section of this chapter.

With the exception of mother speakers' relatedness to their fathers' SES and father speakers' unrelatedness to their own fathers' SES, the competence ratings of father speakers are much more related to background variables in general than are the competence ratings of mother speakers. This also shows up in the plottings of speakers according to their received factor scores (Figures 36 to 40). Although rater groups have fairly good agreement as to their placement of speakers on the vertical dimension (Factor I), and those mothers of high school education or more are usually above the midline on the competence factor, there are quite a few exceptions. There are also quite a few exceptions to the predictions of competence for mother speakers from their fathers' SES levels, although there is a general trend for those mothers whose fathers' SES category was B to be high on competence and those whose fathers' SES category was D to

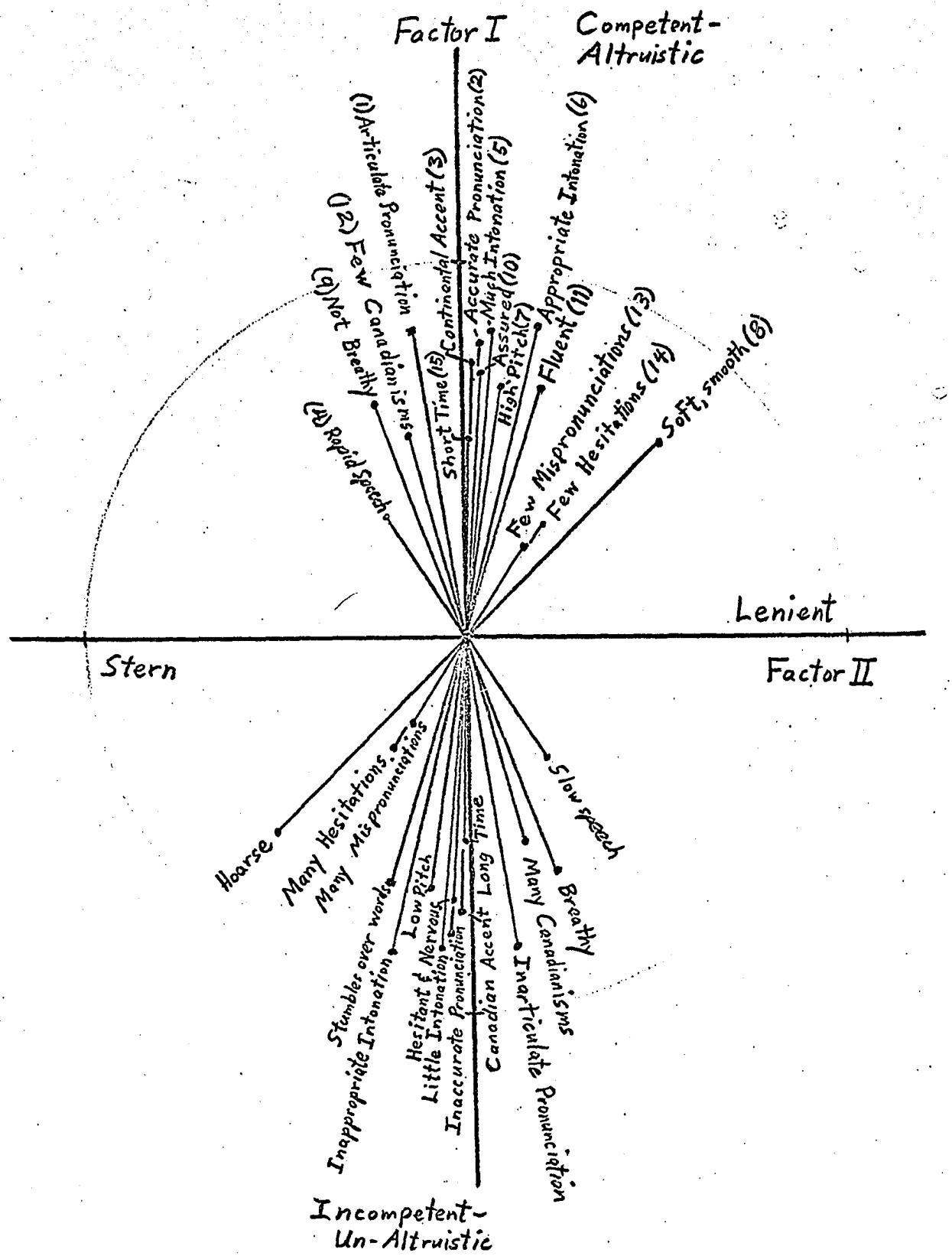
be low on competence. In the case of the father speakers, the only exceptions to the correspondence of their competence ratings to their SES levels were explainable by educational discrepancies (Figure 9 of Chapter III). In general, the correspondence between background variable categories and position on the competence dimension is much less clear for mother speakers than for father speakers. This would suggest that perhaps some other variable in the background of mother speakers might be more related to the impressions they make than are SES or education. However, the lack of agreement among rater groups as to the positions of speakers on the second factor (discipline or benevolence), which is obvious both from a comparison of the factor score plottings for each rater group (Figures 36 to 40) and from the correlations among these scores (Table 25), suggests that part of the problem may be the lack of generality in the impressions that adult women make upon young men. Nothing clear emerges from comparing the factor score patterns of each rater group for mother speakers (Figures 36 to 40) as it did when making the same comparison for father speakers (Figures 21 to 24).

Personality Judgments as Related to Speech Variables.

Figure 42 shows graphically the intercorrelations between the linguistic performance variables and the two personality factors for mother speakers (competence-benevolence and the discipline factor), based on the impressions of the total group of raters. In general, the same speech variables that were found to be highly correlated with the competence judgment for father speakers (see Figure 17) seem to be the basis on which raters judge the competence and benevolence of mother speakers. These speech variables are the ones that have been referred to earlier as "accent variables," including accuracy and articulateness of pronunciation (#2 and #1), amount and appropriateness of intonation (#5 and #6), Continental vs. Canadian accent (#3), and "confidence variables," including breathiness (#9), nervousness (#10), and fluency (#11).

For father speakers, the second factor, benevolence, was not highly related to any of the linguistic variables, although hesitations (#14) and amount of intonation (#5) correlated moderately. For mother speakers the only linguistic variable to which the second factor, discipline, is even moderately related is hoarseness (#8): those mothers who are hoarse are seen as being stern disciplinarians. Note that the vector for hoarseness in Figure 42 corresponds even more closely to the gentille vector of Figure 30 than it does to the discipline factor, so that those mothers who are hoarse are generally seen as being very pas gentille. This is particularly interesting since hoarseness in father speakers was positively correlated with benevolence (see Figure 17), although very slightly. For fathers and

Figure 42. Graph of the Correlations Between Speech Variables and Mother Speakers' Factor Scores from the Total Group of Raters



mothers, hoarseness is indicative of low competence. The hoarse father, then, is considered to be kind and incompetent, and the hoarse mother is considered to be unkind and incompetent.

Notice also that no speech variable corresponds closely to the second factor nor to the adjectives sévère and forte of which the second factor is comprised. The same was true of the second factor (benevolence) for father speakers, and again it must be concluded as it was in the case of father speakers that either there are linguistic variables other than the ones used in this study that are important in the perception of the second personality factor for mothers, or else this judgment is made from a complex combination of speech dimensions. The answer to this question must also be left to future work.

Comparisons of rater groups in their personality judgments as related to speech variables. Table 27 gives the intercorrelations between the linguistic variables and the two factors for mother speakers that emerge from the combined ratings of all three schools (which were shown graphically in Figure 42), and also the same intercorrelations for the factors that emerge from ratings by each of the schools separately and from the ratings by linguistic judges (none of which were shown graphically). In a previous section it was found that Factor II for Schools 2 and 3 is the discipline factor, but for School 1 it is a combination of benevolence and this discipline dimension, and Factor II for linguistic judges is the benevolence dimension just as it was in the perception of father speakers. As was discussed in preceeding sections, there is much less agreement among rater

Table 27. Intercorrelations Between Speech Variables and Mother Speakers' Factor Scores from Each Rater Group

	Schools Combined		School 1		School 2		School 3		Linguistic Judges	
	I. Competent-Benevolent	II. Lenient	I. Competent	II. Lenient-Benevolent	I. Competent-Benevolent	II. Lenient	I. Competent-Benevolent	II. Lenient	I. Competent	II. Benevolent
1) Articulate Pronunc.	.82	-.12	.80	.27	.76	.20	.74	-.23	.86	-.01
2) Accurate Pronunc.	.79	.04	.72	.26	.73	.34	.78	-.12	.74	.03
3) Continental Accent	.73	.03	.65	.12	.67	.50	.72	-.19	.62	.20
4) Rapid Speech	.32	-.20	.36	-.07	.26	.33	.27	-.33	.40	.06
5) Much Intonation	.83	.07	.73	.40	.73	.47	.78	-.13	.83	.00
6) Appropriate Intonation	.83	.20	.68	.44	.75	.42	.84	.04	.81	.07
7) High Pitch	.67	.10	.58	.23	.56	.60	.67	-.06	.59	-.05
8) Not Hoarse	.52	.51	.34	.42	.46	.30	.64	.52	.40	.20
9) Not Breathy	.62	-.23	.56	.19	.70	-.21	.50	-.34	.45	-.27
10) Assured, not nervous	.70	.04	.60	.38	.69	.06	.64	-.08	.67	.06
11) Fluent	.66	.20	.55	.41	.62	.19	.67	.17	.62	.27
12) Few Canadianisms	.54	-.14	.50	-.01	.51	.31	.52	-.33	.46	-.24
13) Few Mispronunciations	.23	.15	.28	.13	.14	.31	.26	.24	.39	.25
14) Few Hesitations	.30	.20	.21	.53	.26	-.11	.24	.24	.29	.68
15) Short time for passage	.52	.01	.49	.02	.51	.27	.56	-.10	.46	.08

groups on the second factor of personality judgment for mother speakers than there is for father speakers, and from this fact it would be expected that different linguistic cues are used by each group to judge these secondary dimensions.

The first factor for all of the rater groups (which reflects competence only for School 1 and the linguistic judges, but competence and benevolence for Schools 2 and 3) is quite highly related to all of the speech variables except rate of speaking (#4), mispronunciations (#13), and hesitations (#14), just as it was in the perception of the adult males (father speakers).

Hesitations (#14), the speech variable that was important in the perception of benevolence in father speakers, is quite related to the benevolence factor (Factor II) in the ratings mother speakers receive from both the linguistic judges and School 1 raters. In every case the benevolent-sounding person is the one with few hesitations. It is not very highly related to the second factor for Schools 2 or 3, nor should it be expected to be, since the second factor for these two rater groups does not reflect benevolence.

The discipline factor (Factor II) for School 2 raters is most related to pitch (#7), but it is also quite related to accent (#3), and amount and appropriateness of intonation (#5 and #6). School 2 raters, then, consider speakers with low-pitched voices and little intonation, inappropriate intonation and a Canadian accent to be stern disciplinarians. On the other hand, School 3 seems to be judging the discipline dimension primarily on the basis

of hoarseness. Although hoarseness is only slightly related to the second factor for School 2, it is related a bit more to the second factor (benevolence-discipline) for School 1, and it is the only speech variable that is universal enough in its relationship to the discipline dimension to be related to that dimension in the combined ratings of the three schools.

Even though Schools 2 and 3 use the same dimension, the discipline dimension, as their second independent factor for judging the personalities of mother speakers, it seems that they are judging that dimension on the basis of different linguistic cues, and it seems likely that they will not agree highly as to which speakers are stern disciplinarians and which are lenient. That such is the case is shown in Table 25. The second factor for School 2 correlates only .21 with the second factor for School 3. In fact, even though the second factor for School 1 is slightly different from that of School 3 in that it includes benevolence, the correlation between the second factors for these two schools is higher than that between Schools 2 and 3. School 2, then, is the rater group with the most idiosyncratic second factor; it correlates only .05 with that of School 1 and -.18 with that of the linguistic judges. (See Table 25.)

There is one other obvious difference between Schools 2 and 3 in their ratings on the discipline factor, which makes good sense conceptually. School 2 tends to rate those who are high on the "accent" and "confidence" speech variables as being lenient (note the positive correlations between these speech variables and Factor II for School 2 in Table 27), but School 3 tends to rate them as being more stern (note the negative correlations between

these speech variables and Factor II for School 3 in Table 27). Since School 3 raters in general come from a lower SES level than do School 2 raters, and since low SES and less educated mothers were found to be lower on the "accent" and "confidence" variables, it appears that both School 2 and School 3 raters have a tendency to rate those mother speakers who are most similar to their own mothers as being more lenient. This may be a fruitful hypothesis for future research aimed at determining the basis of these judgments of discipline style.

The lack of agreement between Schools 2 and 3 in their attribution of stern or lenient to mother speakers is shown in a comparison of the plottings of factor scores for each school in Figures 38 and 39. Notice that speakers F2 and A2 are considered to be lenient by School 2 raters, whereas School 3 raters see them as stern; and speakers C5, A3 and B1 are stern for School 2 but lenient for School 3. As would be expected (since the lenient-stern discipline dimension is judged mostly on the basis of pitch by School 2 and mostly on the basis of hoarseness by School 3) A2 is high in pitch but relatively hoarse, in contrast to C5 who is low in pitch but not very hoarse. (See Table 28 for speaker orderings on the speech variables.) However, B1 and A3 reverse this expected pattern and although it is School 2 raters who rate them stern, they are lower on the hoarseness variable (more hoarse) than they are on the pitch variable. There are speakers such as C6, D2 and A1 who are in about the same ordinal position on pitch and hoarseness, and who are, as would be expected, in about the same position on the discipline dimension in the ratings by School 2 and

Table 28. Ordering of Mother Speakers on Each of the 15 Speech Variables

	SPEAKER ORDER																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
1) Articulate pronunciation	B6	A2	A3	B2	D1	C2	B5	B3	C5	D6	D5	C1	B4	D2	C4	C6	A1	B1	C3	D4	Inarticulate pronunciation
2) Accurate pronunciation	B6	A2	B2	D1	C2	A3	B3	B5	D2	B4	C5	C4	A1	D6	B1	C6	C1	D4	D5	C3	Inaccurate pronunciation
3) Continental French accent	A2	B6	A3	B2	C2	B4	B3	B5	D1	A1	D2	D6	D4	C6	C5	C4	C3	C1	B1	D5	Canadian French accent
4) Rapid speech	D1	D5	C3	C1	C6	B5	A2	B1	C2	A3	A1	B2	D6	C4	B4	B3	B6	D2	D4	C5	Slow speech
5) Much intonation	A2	A3	B3	B2	D1	B5	C2	B6	D6	C3	D5	C6	D2	A1	B4	C1	C4	B1	C5	D4	Little intonation
6) Appropriate intonation	A3	A2	B3	B2	D1	C2	B6	D6	A1	D2	B5	C3	C5	C1	C4	D5	B1	D4	B4	C6	Inappropriate intonation
7) High pitch	A2	B3	C3	C2	A3	B2	D6	B1	D1	D5	C1	B4	B6	C4	B5	C6	D4	C5	D2	A1	Bass pitch
8) Soft voice	C2	D4	B2	B6	B3	D1	A3	D6	C5	B4	C3	B5	B1	A2	C4	C1	A1	D2	C6	D5	Hoarse voice
9) Not breathy	A3	A2	D1	B2	B5	B4	D2	D6	C5	B1	C6	D4	B3	D5	C1	B6	C2	C4	A1	C3	Breathy
10) Assured	A3	A2	B2	D1	C2	C6	B5	D2	C5	B3	D6	B6	B4	B1	A1	C4	C1	D4	C3	D5	Hesitant and nervous
11) Smooth, fluent speech	A3	B2	A2	B3	C2	D1	B6	D2	C5	C3	D6	B4	C6	B5	D4	A1	C4	C1	B1	D5	Stumbles over words
12) Few Canadianisms	A2	B6	C4	B5	B1	D6	C5	B3	C6	D5	B4	A1	B2	C1	A3	C2	C3	D1	D2	D4	Many Canadianisms
13) Few mis-pronunciations	A2	A3	B2	C2	C3	D1	D2	B6	A1	B3	D6	D4	C1	B4	C5	D5	C6	B5	B1	C4	Many mis-pronunciations
14) Few hesitations	A2	A3	B2	B3	C2	C3	D1	D2	B6	B4	C6	A1	B1	B5	C5	D6	C1	D4	D5	C4	Many hesitations
15) Short time for passage	D1	C2	A1	A3	A2	C1	C3	B2	D2	B4	C6	C4	B5	D4	B1	D6	B6	D5	B3	C5	Long time for passage

those by School 3. But there are also speakers such as C3 and C1 whose positions in the orderings of pitch are quite different from their positions in the orderings of hoarseness, yet they are also rated in about the same position on the discipline dimension by both schools.

The only conclusion that can be made from this analysis of individual cases is that, although the correlations between each speech variable and the secondary factors (Table 27) give an idea of major trends, the correlations are not strong enough to provide good prediction of speakers' personality ratings from their speech. This is particularly true of the second factor of personality judgment and particularly for mother speakers.

Conclusions. For both father speakers and mother speakers the first personality factor (which in every case is primarily the dimension of competence, although for mothers' ratings it often includes benevolence) is highly related to most of the speech variables (see Table 27 and Figures 42 and 17.) Also, different rater groups have a high degree of agreement in their assignment of both mother and father speakers to positions on Factor I (agreement is slightly higher for father speakers), and inter-rater reliabilities within a group of raters are higher for competence adjectives than for any of the others (Table 6). It can be concluded, then, that the competence impression is quite predictable from speech parameters and that there is a high degree of inter-rater reliability and a high degree of agreement between groups in the ratings given to speakers on this dimension.

As has been pointed out in the preceeding paragraphs, the prediction of mother speakers' positions on the discipline or benevolence-discipline dimension is a very complex matter, and lies beyond the scope of a broad, general study such as this one. For each group of raters, this secondary factor is at best only moderately correlated with speech variables, and then only with one or two (Table 27). Not only is the second factor in the perception of mother speakers much less predictable from speech variables than the first, there is also much less agreement among rater groups in the relative positions of speakers on this dimension (Table 25). The highest correlations between second factors for rater groups are only in the .40's and the lowest is -.18. (Part of the reason for this is that the second factor for some rater groups represents a different dimension than it does for others. However, even those two rater groups, Schools 2 and 3, who are using the same dimension correlate only .21 in their assignment of speakers on that dimension.) In the case of the father speakers there is much more agreement among rater groups with respect to the second factor (which is benevolence), with most of the intercorrelations between rater groups on that factor in the .50 to .70 range. But, even in the case of fathers, the prediction of this second factor is very poor from the speech variables used in this study. In order to determine the basis on which raters judge the benevolence or discipline (stern-lenient) dimensions, studies which are focused only upon that problem will be necessary. The finding that raters from School 2 and also raters from School 3 attribute greater leniency to mothers of SES level similar to

their own is encouraging in that it shows that, although the judgments on the discipline dimension are complex, the disagreements among raters are quite logical and lawfully determined. It may be found in future research that the extent to which a young man attributes leniency to adult women of similar SES level to his own is determined by how much he likes his own mother or how lenient or benevolent he thinks she is. Perhaps some of the answers to the problem of how the benevolence impression is formed in person perception will be found in studies of parent-child identification.

Chapter V

Son Speakers: Results and Discussion

In its analysis of the reactions of 10th and 11th grade young men to the speech of son speakers, this study is somewhat limited in that the son speakers were contacted through the schools which they attend. Thus all of them have at least reached the 10th grade, meaning that they represent a select subgroup of the French Canadian population, at least as far as school achievement is concerned. Of the ten father speakers who fall into the group with the very clearly less favorable personality ratings (shown in Figure 4 of Chapter III), seven in their teen years would not have been included in a sampling of 10th and 11th graders since their schooling stopped at grade nine or before. Many of the 3rd grade boys in Frender's study who were under-achievers in school and who were found to show signs of a pronounced "masculine" motivation and who were less expressive in their speech, would also be left out of a 10th and 11th grade sample, since they are the ones who are likely to drop out of school.[12]

In some preliminary work for this study, the hypothesis was put forth that sons who identify highly with their fathers, i.e., rate their fathers similarly to themselves on personality adjectives, would sound more like their fathers in their speech. The idea was that identification with the

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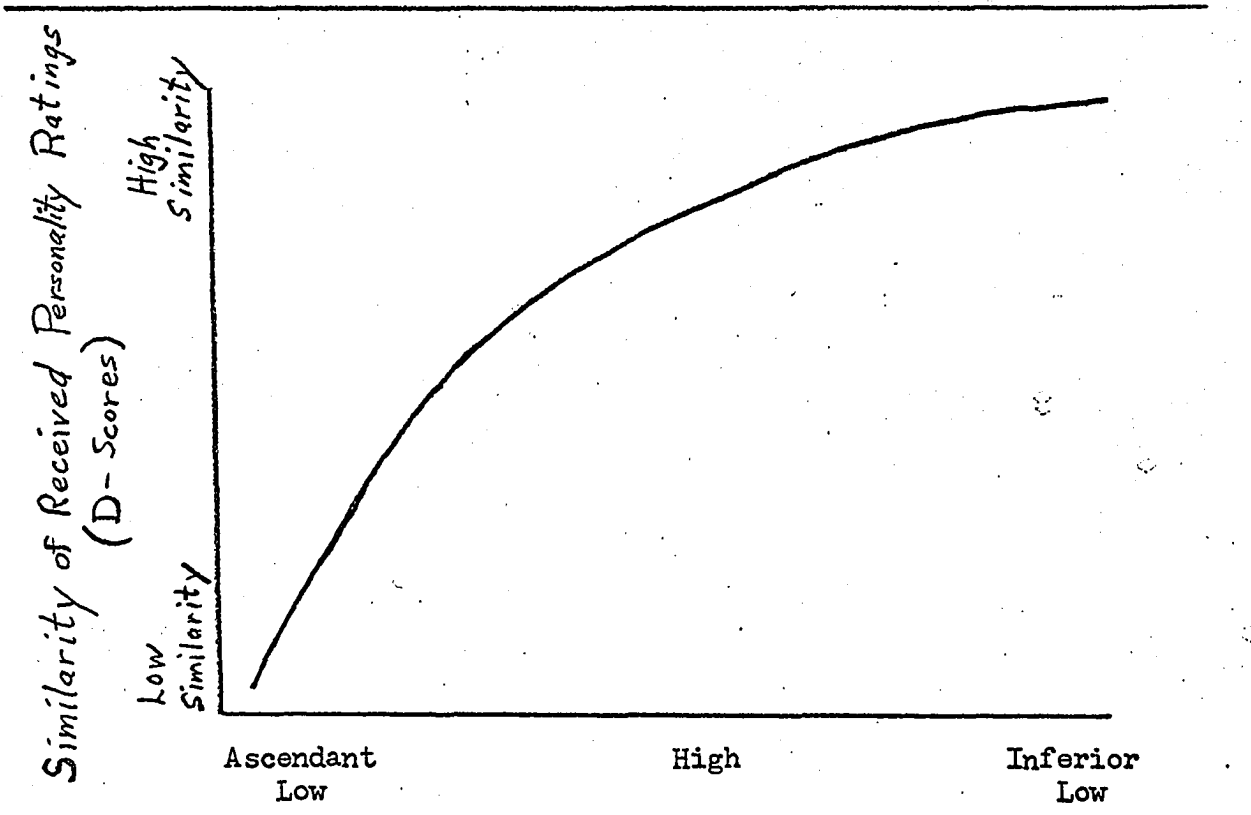
[12] It seems likely that not only the son speakers of this study, but also the mother and father speakers are a biased sample of the French Canadian population, since those parents whose sons continue in school probably value education much more than those who allow their sons to drop out. Upward mobility may be very much a function of parental encouragement.

father would lead to or accompany modelling and imitation of his speech. In order to test this idea, groups of raters listened to the speech of the fathers and their sons (reading the same passage used in this thesis), not knowing which son belonged to which father, and rated them on a number of paired adjectives similar to the ones used in this thesis, and the patterns of received scores for father-son pairs were compared statistically for their similarity (using D-scores as described in Osgood, 1957).

When the sons rated themselves similarly to their fathers, the raters also rated them similarly, with a correlation of .38 between the two similarity scores, significant beyond the .05 level. In this first analysis no differentiation was made between the boys who rated themselves more favorably than their fathers and those who rated themselves less favorably. Both were considered to be low identifiers. When the low identifier group was broken into an "ascendant low" group (those who rate themselves more favorably than their fathers) and an "inferior low" group (those who rate themselves less favorably), this evaluation of the father relative to self was found to correlate .45 with the similarity of the father and the son in their personality ratings received from the listeners. That is, those who rated fathers more favorably than self were rated more similarly to their fathers (in the judgments by listeners) than those who rated self more favorably than father. The relationship follows the curve shown in Figure 43. It seems, then, that the more highly a young man regards his father relative to himself, the more he will sound like him. This suggests that perhaps those sons who evaluate their fathers more favorably

Figure 43. The Relationship Between the Identification of Sons with Their Fathers and Their Similarity to Their Fathers as Rated by Others from Their Speech



are modelling more upon their fathers' speech. (It would be useful to repeat this kind of study using linguistic measures of speech similarity rather than personality ratings, which are one step removed.)

However, there are alternative explanations for the obtained results other than the speech modelling one. Upon closer analysis it was found that the sons as a group were rated much more favorably than their fathers. It was also found that the fathers who were rated highest were those of the higher SES levels; in fact this finding led to the research reported

in this thesis. Since the sons as a group were rated more favorably than fathers, it follows that the higher SES fathers were therefore rated more similarly to their sons than were the low SES fathers who received less favorable ratings. That is, sons of the low SES fathers might be expected to agree with the rater groups that their fathers are less intelligent, less ambitieux, less sûr de soi, etc. Rather than being an expression of lack of admiration for the father, the disparity in their ratings of self and father could be considered an indication of their objectivity in facing the facts. (It would be interesting and useful to re-analyze this data to compare their ratings of their father on "competence" adjectives with their ratings on "benevolence" adjectives.)

As mentioned in Chapter III, it is probably true that the low SES son speakers in this thesis don't identify highly with their fathers, since most of them have already passed their fathers in education, and their reference group seems to be a higher SES level. It would be interesting now, in light of the results of this thesis, to carry out a more detailed study of identification and speech similarities between French Canadian boys and their fathers, using a more representative sample which would include those boys who have dropped out of school and who will become lower SES fathers in ten years.

Speech Differences Among Son Speakers.

Table 29 shows the inter-correlations among the ratings received by son speakers on the 15 linguistic variables. The pattern of the relationships for sons is very much like the pattern found for fathers (Table 10) which is displayed graphically in Figure 13. The sons' pattern is even more similar to that for fathers than was the mother speakers' pattern (Table 18 and accompanying discussion). The two major groupings of variables for son speakers, the "accent" variables (Box I of Figure 13), and the "confidence" variables have high inter-correlations among the variables within each of these two groupings just as they did in the case of father speakers (Figure 13). The two groupings are also moderately related to each other for both father and son speakers. For mother speakers, breathiness was not closely related to the other "confidence" variables as it was for fathers. For sons it is almost as closely related as it was for fathers. The tally of hesitations, which was highly related to the "confidence" variables for fathers, but not for mothers, is also highly related for sons.

There are a few rather minor differences between the pattern for fathers and that for sons. Judged speaking rate for fathers was related only to total time, but for sons it is also slightly associated with pitch (high pitch accompanying rapid speech), as it was for mothers. Also, total time for fathers was comprised of both hesitations and judged speaking rate. For sons it is still highly related to hesitations, but only slightly to judged speaking rate.

Table 29. Matrix of Inter-correlations Among Son Speakers' Scores on 15 Linguistic Variables

	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1) Articulate pronunciation	.90	.74	.26	.82	.83	.68	.50	.44	.62	.70	.61	.17	.47	.18
2) Accurate pronunciation		.87	.22	.79	.86	.49	.57	.52	.68	.79	.75	.12	.50	.35
3) Continental French accent			.28	.62	.70	.36	.52	.51	.65	.70	.75	-.03	.45	.41
4) Rapid speech				.07	.10	.38	.03	-.17	.02	.07	.03	.32	.22	.32
5) Much intonation					.96	.53	.56	.43	.56	.63	.57	.08	.44	.18
6) Appropriate intonation						.50	.60	.50	.62	.71	.60	.16	.50	.29
7) High pitch							.31	.11	.19	.28	.19	.20	.33	-.03
8) Not hoarse								.33	.38	.45	.51	.09	.19	.41
9) Not breathy									.85	.78	.29	-.10	.70	.55
10) Assured, not nervous										.95	.42	.08	.81	.64
11) Smooth, fluent speech											.45	.13	.82	.66
12) Few Canadianisms												-.10	.11	.14
13) Few mis-pronunciations													.26	.17
14) Few hesitations														.70
15) Short time for passage														

Oddly enough this was reversed in the case of mother speakers, with total time being related to judged rate but not to hesitations.

For sons, pitch has a somewhat different pattern of relationships than it did for fathers. It is not related to the "confidence" variables (except #11 very slightly) as it was for fathers, but it is slightly more related to the "accent" variables (except for #3). Pitch for mother speakers was even more related to the "accent" variables than it is for sons, but it was also somewhat related to the "confidence" variables in the case of mothers. Pitch and hoarseness were correlated .47 for mother speakers, with low pitch accompanying hoarseness, as would be predicted by the Freudian proposal put forth by Rousey and Moriarty (1965), which holds that both are expressions of "masculine motivation." The correlation between these two variables for father speakers was only .17, and hoarseness was found to be characteristic of lower SES and less educated fathers, whereas deeper pitch was not. It was proposed that perhaps masculine motivation and the accompanying subconscious lowering of the voice occur among low achievers more at the younger age levels, and that the hoarseness that persists at later ages is a result of the "vocal nodules" spoken of by Rousey and Moriarty, which are a result of such misuse of the voice. Pitch and hoarseness are somewhat more related to each other in the speech of the sons than they were in that of the father speakers, but the relationship is still a modest one ($r = .31$).

Frender found pitch to be a more important characteristic than hoarseness in differentiating high and low achievers among third grade boys of low SES (Table 12, Chapter III), which fits the argument that

pitch is a more important characteristic of masculine motivation at earlier ages, whereas hoarseness is more important later (since "vocal nodules" only come about after prolonged misuse of the voice). If this line of reasoning is correct, those teen-age son speakers in this study who are low achievers in school should be hoarser and also have deeper voices than those who are high achievers. Unfortunately, this proposal can't be directly tested, since no information was obtained for the son speakers concerning their school performance. However, in the following paragraphs the speech performance of the son speakers will be analyzed according to the SES level of their fathers and the hypothesis that masculine motivation is greater among those who come from lower SES homes can be tested. Also, it should be kept in mind that the extremely low-achieving teen-age boys who would be expected to show the most hoarseness and the deepest pitch are not included in this study since they are not in school by grade 10 or 11 (as discussed in the first paragraphs of this chapter).

Speech differences as related to background variables. Table 30 displays the average ratings and scores received on the 15 speech variables by each SES grouping of sons, as well as the comparisons of upper class son speakers with those from France. The son speakers from France are rated more favorably than the upper class French Canadian son speakers on every speech variable except two, judged rate of speaking and mispronunciations. On four of the variables (accuracy of pronunciation, accent, nervousness and hesitations) the ordering of son speakers is perfect with all of those from France being rated higher than all of those from Canada (as shown by the significant results of

Table 30. Linguistic Ratings of Son Speakers Analyzed According to Speakers' Fathers' SES Levels and Countries of Origin

	Upper-class French vs. Upper-class French Canadians				Groupings According to Speakers' Fathers' Occupational SES Levels											
					total	AB vs. CD				A vs. B				C vs. D			
A. Linguistic Ratings	French	A+B	%v	X2	%v	A+B	C+D	%v	X2	A	B	%v	X2	C	D	%v	X2
Prononciation:																	
1) Articulée, marquée	2.3	***4.1	.37		.32	4.0	**4.6	.10		3.0	***4.4	.22		4.5	4.7	.00	
2) Juste	2.0	***4.8	.55	***	.33	4.7	* 5.2	.06		3.7	***5.2	.27		5.1	5.3	.00	
Accent:																	
3) Continental	1.5	***6.0	.95	***	.33	5.9	**6.4	.23		5.6	* 6.1	.10		6.5	6.3	.00	
Vitesse du Monologue:																	
4) Rapide	2.8	3.5	.16		.14	3.5	3.6	.00		2.1	***4.0	.14		3.6	3.7	.00	
Intonation:																	
5) Beaucoup	3.1	**4.4	.13		.40	4.2	***5.5	.27	*	3.2	***4.7	.13		5.6	5.4	.00	
6) Juste	3.3	***4.8	.26		.25	4.7	***5.4	.14		4.0	**5.0	.11		5.4	5.5	.00	
Particularités de la voix:																	
7) Aiguë	3.7	* 4.6	.06		.06	4.2	**4.9	.06		3.9	4.4	.00		5.0	4.8	.00	
8) Douce	3.5	* 4.4	.19		.03	4.3	4.6	.03		4.3	4.3	.00		4.6	4.7	.00	
9) Peu haletante	2.6	* 3.5	.31		.05	3.6	3.8	.01		3.7	3.5	.00		3.6	4.1	.04	
Particularités de l'individu:																	
10) Assuré et détendu	2.0	***3.6	.34	***	.08	3.7	**4.4	.08		3.4	3.8	.00		4.2	4.5	.00	
11) Mots coulent sans accrocs	1.7	***3.8	.40		.14	3.9	**4.5	.06		3.4	* 4.1	.03		4.2	**4.3	.05	
B. Linguistic Tallies																	
12) Canadianisms	1.0	***5.6	.61		.17	5.3	***7.9	.42		4.2	5.9	.05		8.2	7.5	.00	
13) Mispronunciations	0.0	0.0	.00		.42	0.4	0.2	.12		0.1	* 0.6	.30		0.2	0.2	.00	
14) Hesitations	0.0	***0.7	.11	***	.07	0.7	**1.2	.05		0.4	* 0.9	.02		1.1	1.4	.00	
15) Time for passage	120	***133	.24		.17	135	138	.01		132	136	.01		132	***145	.15	

Note: This table is comparable to Tables 9 and 19 which give similar information but for father and mother speakers. Consult the notes to Tables 4 and 9 for detailed explanation.

the exact test, in the column labelled X2).

The accent variables seem to be the main speech characteristics that are indicative of or related to son speakers' family SES levels. The same was true for father and mother speakers. Mother speakers' performance on the "accent" variables was slightly less related to the SES level of their family (around 20% - 30% variance accounted for, see Table 19) than it is here in the case of sons (30% - 40%). Father speakers' accent variable performance was much more predictable from SES (70% - 90%, see Table 9) than either that of mothers or that of sons, which isn't too surprising since occupational SES is a direct result of the competence level of the father.

The major difference between SES groups of father and mother speakers occured at the AB vs. CD split, but in the case of son speakers the major difference is between the aristocratic sons (Category A) and all other sons. The aristocrats are more articulate and accurate in their pronunciation, have a more continental accent, intonate more, and their intonation is more appropriate. In fact, they are as much higher than the other Canadian speakers as the sons from France are higher than the aristocrats on all of the accent variables except the continental-Canadian accent rating.

Other than the accent variables, the only other ones on which a very large amount of variance is accounted for by SES are Canadianisms, which is closely related to accent and mispronunciations. It is rather strange that it is sons from one of the high SES categories, Category B, who have more mispronunciations than sons from either of the lower SES categories (C or D). The Category A and B sons are significantly higher

than the Category C and D sons on two of the confidence variables, and the aristocrats have fewer hesitations and are judged to speak faster than the other three groups, but on none of them does the SES categorization account for much variance.

Sons from the two upper SES groups have higher-pitched voices than those from the two lower ones, as the "masculinity-motivation theory" put forth in Chapter III would predict, but again the relationship is a small one. There is no significant difference on hoarseness, although the group averages indicate that the two upper groups are slightly less hoarse.

When the sons' speech is analyzed according to their fathers' educational level or that of their mothers,[13] about the same pattern as has been described for the SES analysis (Table 30) emerges. However there are a few small differences. The confidence variables for sons are a bit more related to fathers' education (slightly over 20% common variance) than they were to SES, and total time for the passage and hesitations are more related to fathers' education, although judged speaking rate is not as related as it was to family SES. Those with highly educated fathers speak faster, more confidently, and with fewer hesitations. Also, boys whose fathers have high school or university education have higher pitched voices, and the relationship is a much stronger one (30% common variance) than it was in the SES

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[13] Tables for these two analyses as well as the analysis of son speakers according to the SES levels of their maternal grandfathers are not included. The major results from these tables are given in this and the following paragraph.

analysis, thus giving further support to the idea that "masculinity motivation" is likely passed on from father to son. Although the difference in hoarseness isn't significant in the analysis by fathers' education, those sons whose mothers have been to university are significantly less hoarse (43% of the variance accounted for) than all of the others, suggesting that perhaps hoarseness is at least partly a function of the mother-son relationship.

The analysis of sons according to their maternal grandfathers' SES levels doesn't seem to be an important one. Only on five speech variables (articulateness of pronunciation, amount and appropriateness of intonation, accent, and Canadianisms) is the son speakers' performance even slightly related to the SES of their maternal grandfather. On none of them is over 25% of the variance accounted for. All of them are either accent variables or variables closely related to accent, so it seems again that accent is the most related to background.

A rather surprising finding emerges in the analysis of son speakers' speech performance according to their paternal grandfathers' SES levels (Table 31). Their speech is more predictable from their paternal grandfathers' SES levels than it is from any of the other background variables, with almost twice as much variance being accounted for on most of the variables. On all of the five accent variables as well as Canadianisms, and on two of the three confidence variables, the ordering of son speakers in their received speech ratings is sufficiently predictable from their paternal grandfathers' SES categories to fit the contingency table of Figure 44, which is significant at

the .05 level. Not only are the sons with paternal grandfathers of SES Category B rated markedly higher on the accent and confidence variables than those whose paternal grandfathers are of lower SES level, but they also have higher-pitched voices (31% variance accounted for) and they are not as hoarse (57% variance accounted for), suggesting that they are lower in "masculinity motivation." It seems from this evidence, then, that accent, confidence in speech, and "masculinity motivation" are passed on from paternal grandfather to grandson rather than from father to son, at least in this sample of French Canadian families.

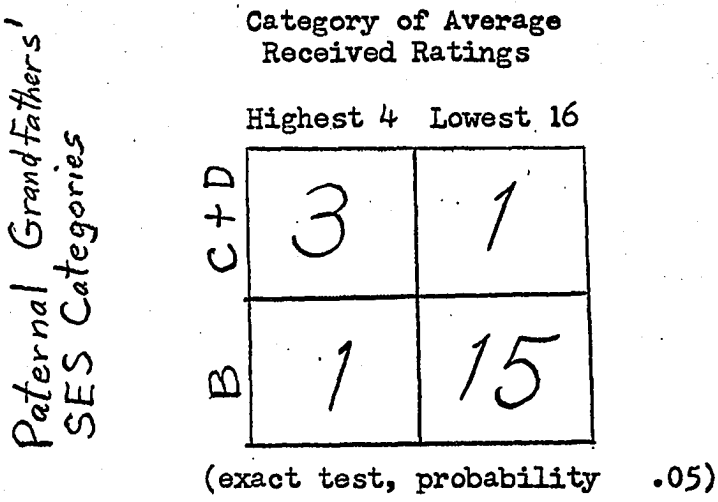
This evidence suggests the possibility that perhaps the high degree of social mobility among male French Canadians, mentioned by Falardeau, is a rather temporary change, lasting for only a generation, with the third generation having a tendency to regress to the level of the first. There is something more operating here than a simple principle of biological regression (Galton, 1885), because, as we have found, the sons' speech is highly related to the SES level of their paternal grandfather but hardly related at all to that of their maternal grandfather, and also, simple regression toward the mean would reduce variance and would not increase the correlation of sons' speech with their grandfathers' SES (over the correlation of their speech with their fathers'SES). The finding therefore remains, that although the father is only slightly similar in speech to the grandfather in the paternal lineage, and although the son is only moderately similar in speech to the father, there is a strong link between the son and the grandfather.

Table 31. Linguistic Ratings of Son Speakers Analyzed According to Their Paternal Grandfathers' Occupational SES Levels

	Groupings According to Speakers' Paternal Grandfathers' Occupational SES Levels								
	total	B vs. CD				C vs. D			
A. Linguistic Ratings	%v	B	CD	%v	X2	C	D	%v	X2
Prononciation:									
1) Articulée, marquée	.58	2.9	***4.7	.58	*	4.4	4.6	.00	
2) Juste	.60	3.6	***5.4	.60	*	5.2	5.3	.00	
Accent:									
3) Continental	.76	5.4	***6.4	.76	*	6.2	6.4	.00	
Vitesse du Monologue:									
4) Rapide	.05	3.3	3.8	.02		3.2	3.7	.03	
Intonation:									
5) Beaucoup	.48	3.2	***5.3	.48	*	5.6	5.3	.00	
6) Juste	.50	3.8	***5.4	.49	*	5.7	5.4	.01	
Particularités de la voix:									
7) Aiguë	.32	3.1	***5.0	.31		4.5	5.0	.01	
8) Douce	.57	3.6	***4.7	.57		4.8	4.7	.00	
9) Peu haletante	.39	3.0	**3.7	.18		4.7	**3.9	.21	
Particularités de l'individu:									
10) Assuré et détendu	.23	3.0	***4.3	.23	*	4.5	4.3	.00	
11) Mots coulent sans accrocs	.26	3.0	***4.5	.26	*	4.7	4.5	.00	
B. Linguistic Tallies									
12) Canadianisms	.26	4.8	**7.2	.25	*	7.4	6.4	.01	
13) Mispronunciations	.01	0.2	0.4	.01		0.3	0.4	.00	
14) Hesitations	.14	0.3	***1.1	.11		1.7	* 1.2	.03	
15) Time for passage	.06	134	136	.01		144	**137	.04	

Note.- This table is comparable to Tables 13 and 22. Also see Tables 4 and 9 for detailed explanation of symbols.

Figure 44. Contingency Table for Some of the Speech Variables in the Comparison of Son Speakers According to Their Paternal Grandfathers' SES Levels



(exact test, probability .05)

For speech variables:

#1 articulateness of pronunciation
#2 accuracy of pronunciation
#3 accent
#5 amount of intonation
#6 appropriateness of intonation
#10 nervousness
#11 fluency
#12 Canadianisms

It's very possible that the regression of the speech performance of the son to fit the SES level of the paternal grandfather isn't indicative of a parallel regression of his future SES level to coincide with that of his grandfather. It may be that the upwardly mobile father speakers use upper SES speech in their occupational settings only, by conformity to those with whom they work, and likewise the downwardly mobiles may conform to the speech

patterns of their co-workers, but both groups may use the same kind of speech in their homes that was used in the homes of their parents. In this fashion the son, by modeling upon the "informal" speech of his father (used at home with the family) comes to speak very much like his grandfather. In a "formal" situation (such as having one's speech recorded) the upwardly mobile father may use his upper SES speech which the son may never have learned. At this stage, of course, these ideas are pure speculation, and the task of finding reliable answers will have to be left to future work. A closer examination of each of the father-son pairs used in this study, tracing through the SES mobility and specific speech patterns of each, would be a good beginning, but a genealogical study of SES mobility, including at least four or five generations (with speech samples from three of them) will be needed in order to come up with more complete explanations.

In the case of the father, mother, and son speakers, it has been the accent variables that were generally the characteristics most related to SES and educational background variables, suggesting that continental vs. Canadian accent and those speech variables associated with it (articulateness, pronunciation and intonation) are the primary speech markers of SES and educational level in French Canada (and perhaps also in other cultures).

Table 32 gives the inter-correlations between the received ratings of fathers, mothers, and sons on the 15 speech variables. In general, the largest correlations between family members are those for the five accent variables, suggesting that accent and associated speech variables are not only the ones that are most related to SES and educational

Table 32. Intercorrelations Between the Received Ratings of Fathers, Mothers and Sons on the 15 Linguistic Variables

	Correlations of Fathers' Ratings with Mothers' Ratings	Correlations of Fathers' Ratings with Sons' Ratings	Correlations of Mothers' Ratings with Sons' Ratings
1) Articulate pronunciation	.56	.42	.43
2) Accurate pronunciation	.64	.34	.43
3) Continental French accent	.77	.68	.65
4) Rapid speech	.03	-.10	.48
5) Much intonation	.64	.53	.37
6) Appropriate intonation	.65	.53	.47
7) High pitch	-.18	.31	.09
8) Not hoarse	.12	.11	-.04
9) Not breathy	.14	.16	.21
10) Assured, not nervous	.47	.20	.41
11) Smooth, fluent speech	.39	-.02	.26
12) Few Canadianisms	.17	.30	.32
13) Few mis-pronunciations	.12	-.01	.17
14) Few hesitations	.34	.03	.19
15) Short time for passage	.40	.17	.57

background, but they are also the speech characteristics which are most likely to be passed on from father to son, mother to son, or picked up by one parent from the other. The son is also quite similar to his mother (but not to his father) on judged speaking rate and total time for the passage, and to his father on pitch.

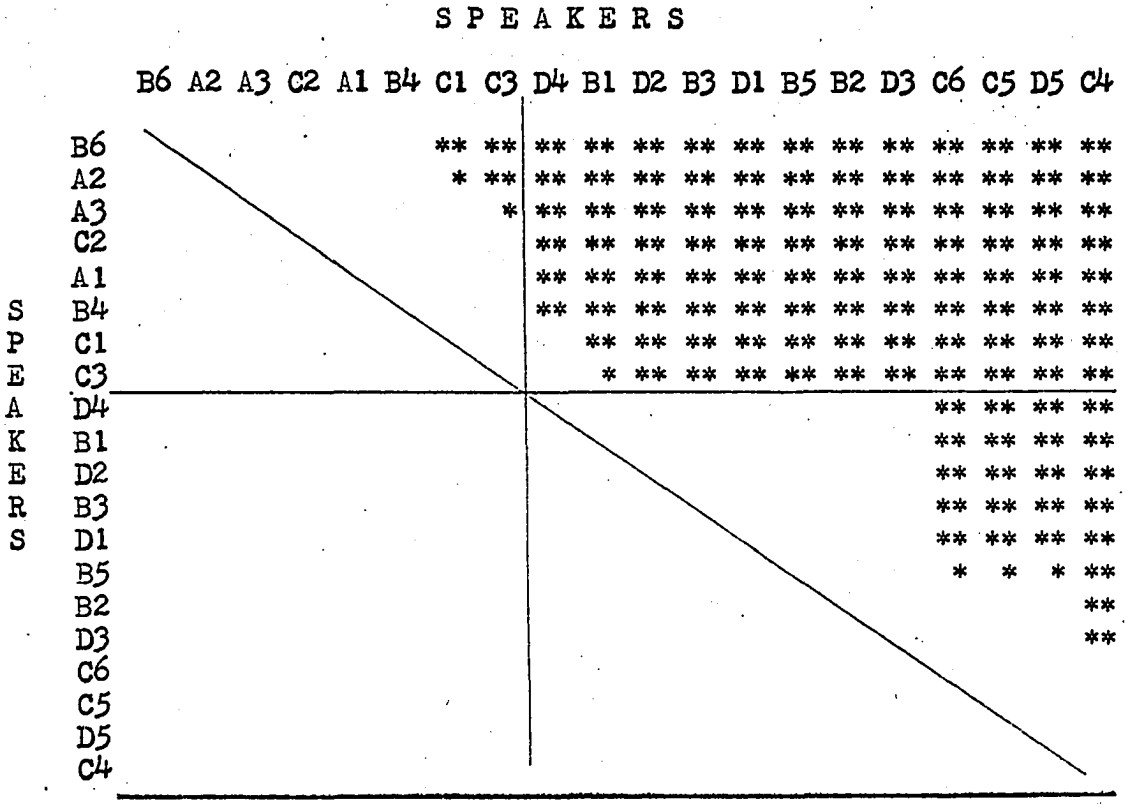
It appears that the father and mother are even more similar to one another in their speech (especially accent and confidence variables) than either of them is to the son. The son is about as similar to the mother as to the father on accent variables, although his amount and accuracy of intonation are very slightly more similar to that of his father, as is his voice pitch. His performance on the confidence variables and his rate of speaking, as mentioned, are more similar to that of the mother. The father and mother are moderately similar to each other on confidence variables.

Judgments of Personality Traits and Ability.

The differences among father speakers in terms of the speech variables were found to be quite continuous (Figure 16), but on personality adjectives and rater judgments of their probable SES levels, a very clear dichotomy was found, with those from the upper SES levels being rated considerably higher than those from lower SES levels, and with very few significant differences among speakers within either group (Figures 4 and 7). Differences between mother speakers in their received ratings on speech variables were also continuous, but so were their received personality ratings (Figure 29). It was proposed that perhaps the dichotomization of father speakers was a result of the tendency of the young male raters to compare the speakers with themselves (since older men probably serve as role models for them) and to rate those who are similar to self as being more similar than they really are, by assimilation, and those who are different from self as being more different than they really are, through contrast. The lack of dichotomization in the case of mother speakers would be predicted by this theory since mothers probably do not serve as role models for normal young men. However, the processes of assimilation and contrast should operate in the perception of son speakers since they are the same age and sex as the raters.

Figure 45 shows the significance level of the differences between pairs of son speakers in their received ratings on intelligent. Although the pattern is not as clearly dichotomous as the received

Figure 45. Matrix of Chance Probabilities of Differences Between Each Son Speaker and Every Other Son Speaker on Average Received Ratings on the Intelligent Adjective



personality ratings of father speakers, neither is it continuous as in the case of mother speakers. The split is between son speakers C3 and D4, with C3 being significantly higher than all of the speakers listed to the right of D4, and D4 being significantly lower than all of the speakers to the left of C1. Notice that the ordering of son speakers is not as systematically related to their family SES levels as it was for fathers. There are three Category C son speakers above the split and four Category B son speakers below it. Just as the son speakers speech patterns are not as highly related to family SES as are their fathers' speech patterns, neither are their received ratings on intelligent or other personality adjectives as related to family SES as are their fathers'. The ratings on actif, sûr de soi and sincère have similar patterns. (Not many of the other adjective ratings for sons have enough significant differences to show a clear pattern and those that do have an almost continuous pattern.)

Realizing that the son speakers are educationally a more select group than their fathers, the contrast process in perception would probably enter more into the pattern of differences between son speakers if the raters were given more extreme examples, drawn from among the school dropout population. However, the predictions of the assimilation - contrast proposal are at least partially supported by these results.

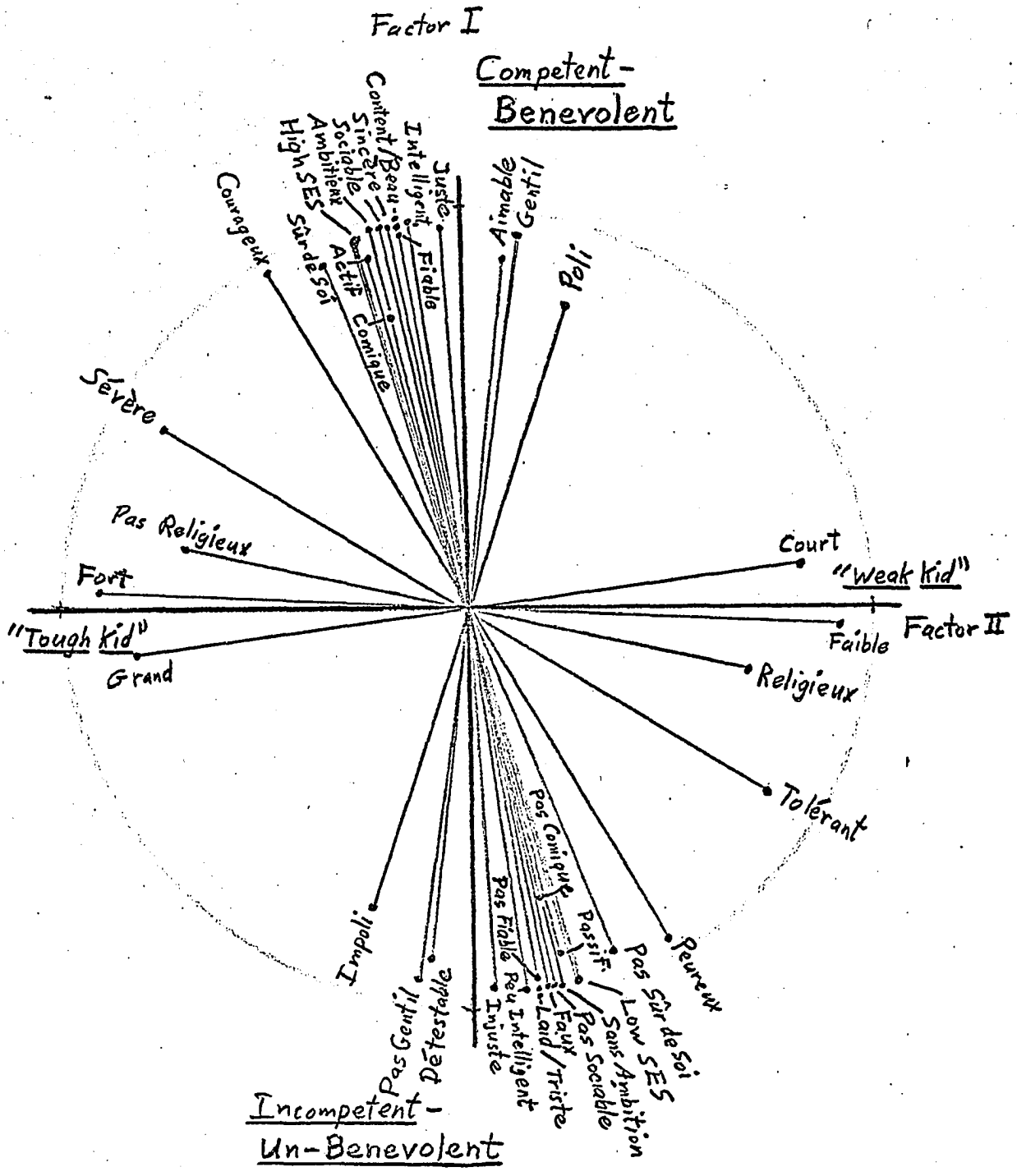
Implicit personality theory of raters for son speakers. Figure 45 is the factor analysis pattern for the average ratings received by son speakers from the total group of 87 raters from the three schools on

the 20 personality adjectives. Benevolence is combined with competence in the first factor just as it was for mothers. However, a very different second factor emerges, and one that makes as much sense for ratings of teen-age boys by other teen-age boys as the "discipline" factor did in the perception of adult women by teen-age boys. The strongest adjective in Factor II is fort followed in importance by grand, then sévère and then pas religieux. Those speakers who are rated toward the left side of Factor II (as it is shown in Figure 46) are seen as being big, tough, severe and unreligious whereas those who are rated toward the right side are seen as being small, weak, tolerant and religious. This very prominent "tough kid - weak kid" dimension should strike most present and former teen-age boys as a very important dimension along which other teen-aged boys are judged, even though the tolérant - sévère or the religieux elements may not always be part of it.

The general trends for the whole group indicate that, in the personality theory held by the group, a "tough kid" can either be competent and benevolent or incompetent and un-benevolent, and both possibilities are also open to a "weak kid"; in other words, the two factors are independent. However, the group of raters as a whole seem to think that a boy who is competent is likely to be benevolent and one who is competent is likely to be un-benevolent.

Perhaps there are differences among the three groups of French Canadian teen-age boy raters (from the three schools) in the dimensions they use for judgment of son speakers and in the way they use them.

Figure 46. Graph of the Rotated Factor Pattern for the Personality Adjective Ratings Given Son Speakers by Raters from All Three Schools



Since we have already found that raters from School 1 seem to have a more mature way of perceiving both father and mother speakers, we are lead to the expectation that they will probably use a more mature basis than the "tough kid - weak kid" dimension for judging other teen-age boys.

Comparisons of rater groups in their personality judgments. The factor analysis patterns for the ratings of son speakers by Schools 1, 2 and 3 and by linguistic judges are given in Figures 47, 48, 49 and 50 respectively. The raters from the three schools seem to be using much the same dimensions for evaluating other teen-age boys: all three combine competence and benevolence (as was found in the analysis for the total group of raters) into the first factor, and Table 33 shows that the rater groups from the three schools and

Table 33. Intercorrelations Among Son Speakers' Factor Scores Received from Each of the Rater Groups

		Intercorrelations Among Scores on Factor I			Intercorrelations Among Scores on Factor II		
		Rater Groups			Rater Groups		
Rater Groups		School 2	School 3	Linguistic Judges	School 2	School 3	Linguistic Judges
	School 1	.93	.86	.83	.85	.42	.30
	School 2		.83	.86		.47	.29
	School 3			.89			-.36

Figure 47. Graph of the Rotated Factor Pattern for the Personality Adjective Ratings Given Son Speakers by Raters from School 1

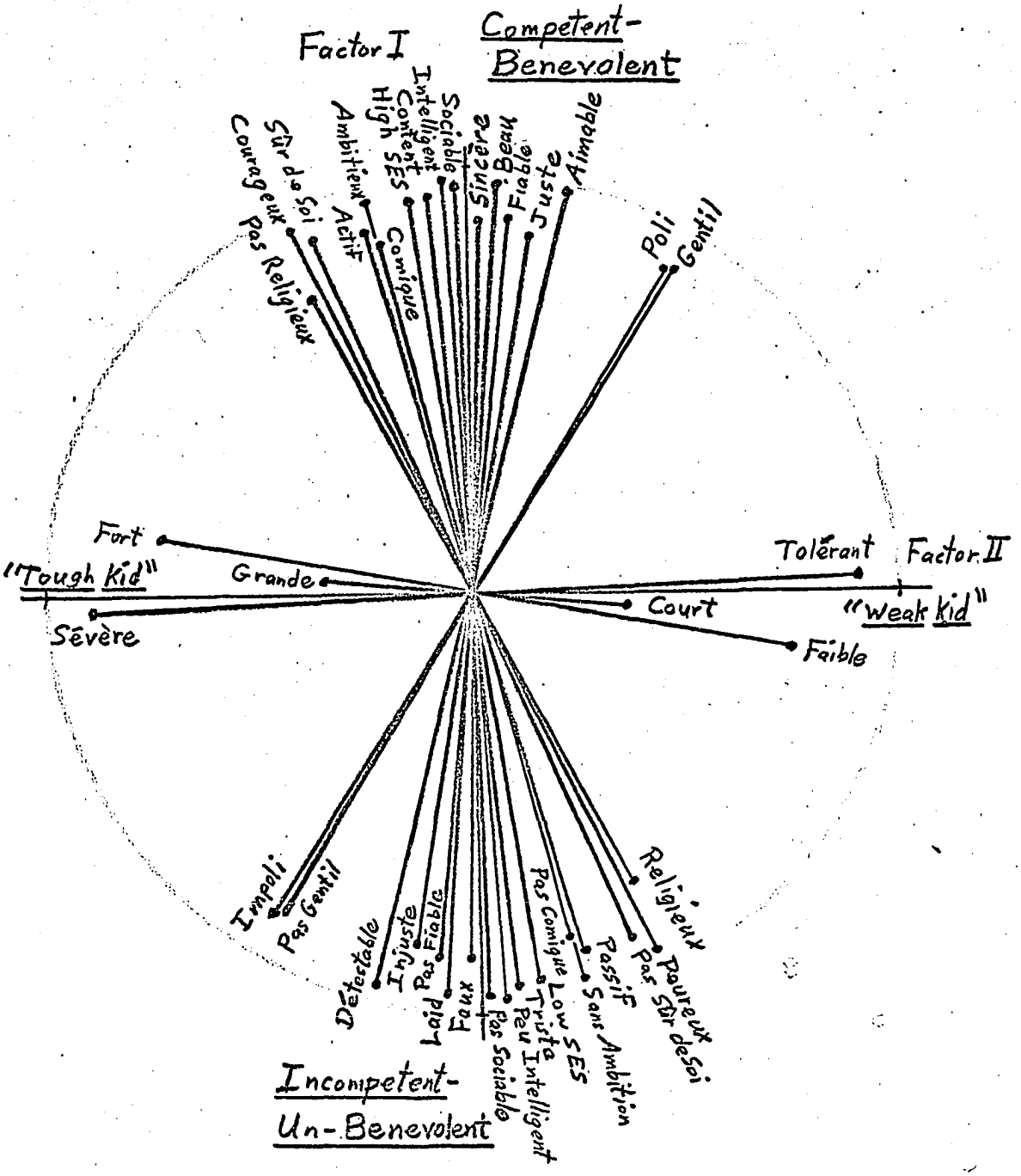


Figure 48. Graph of the Rotated Factor Pattern for the Personality Adjective Ratings Given Son Speakers by Raters from School 2

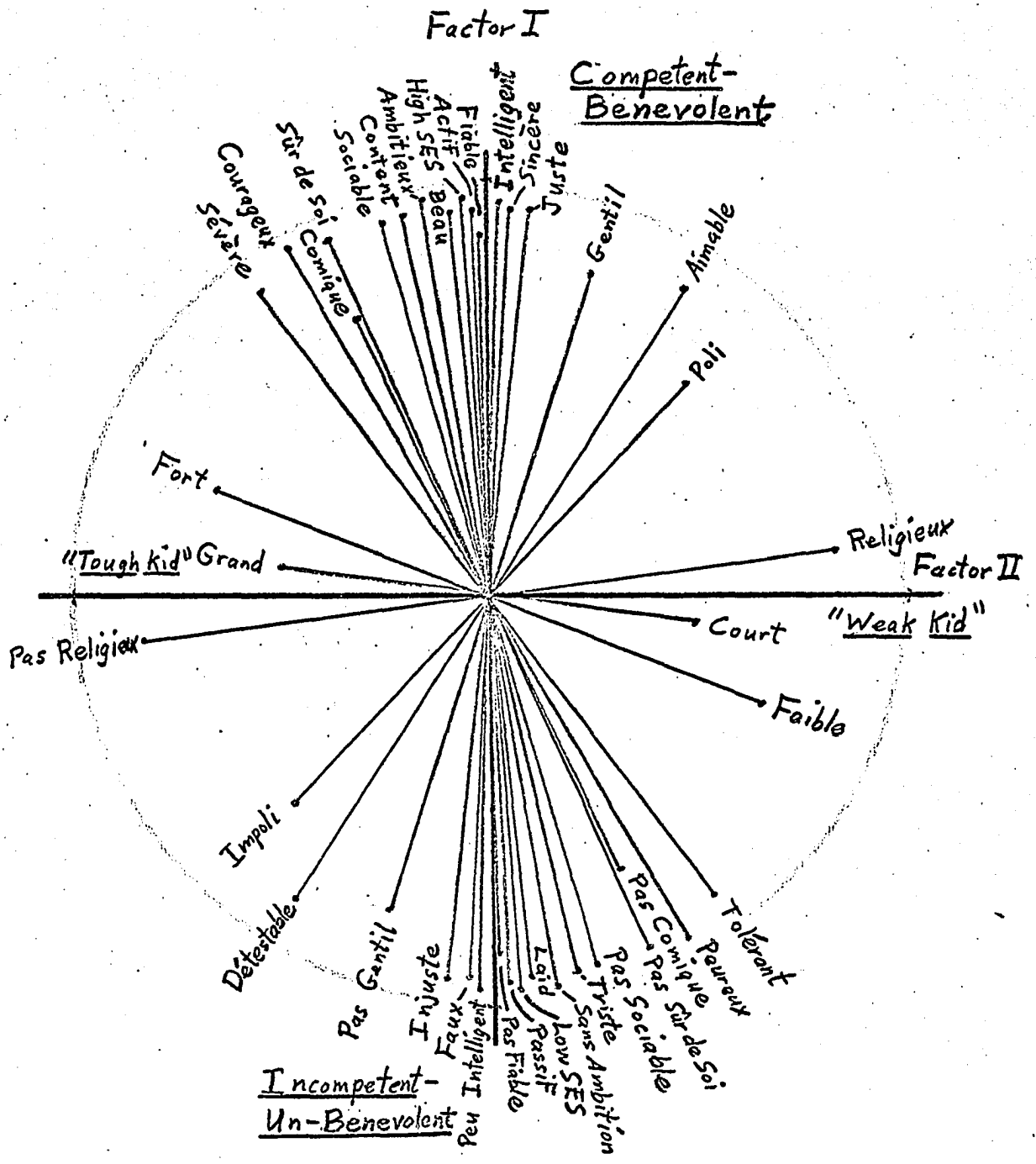


Figure 49. Graph of the Rotated Factor Pattern for the Personality Adjective Ratings Given Son Speakers by Raters from School 3

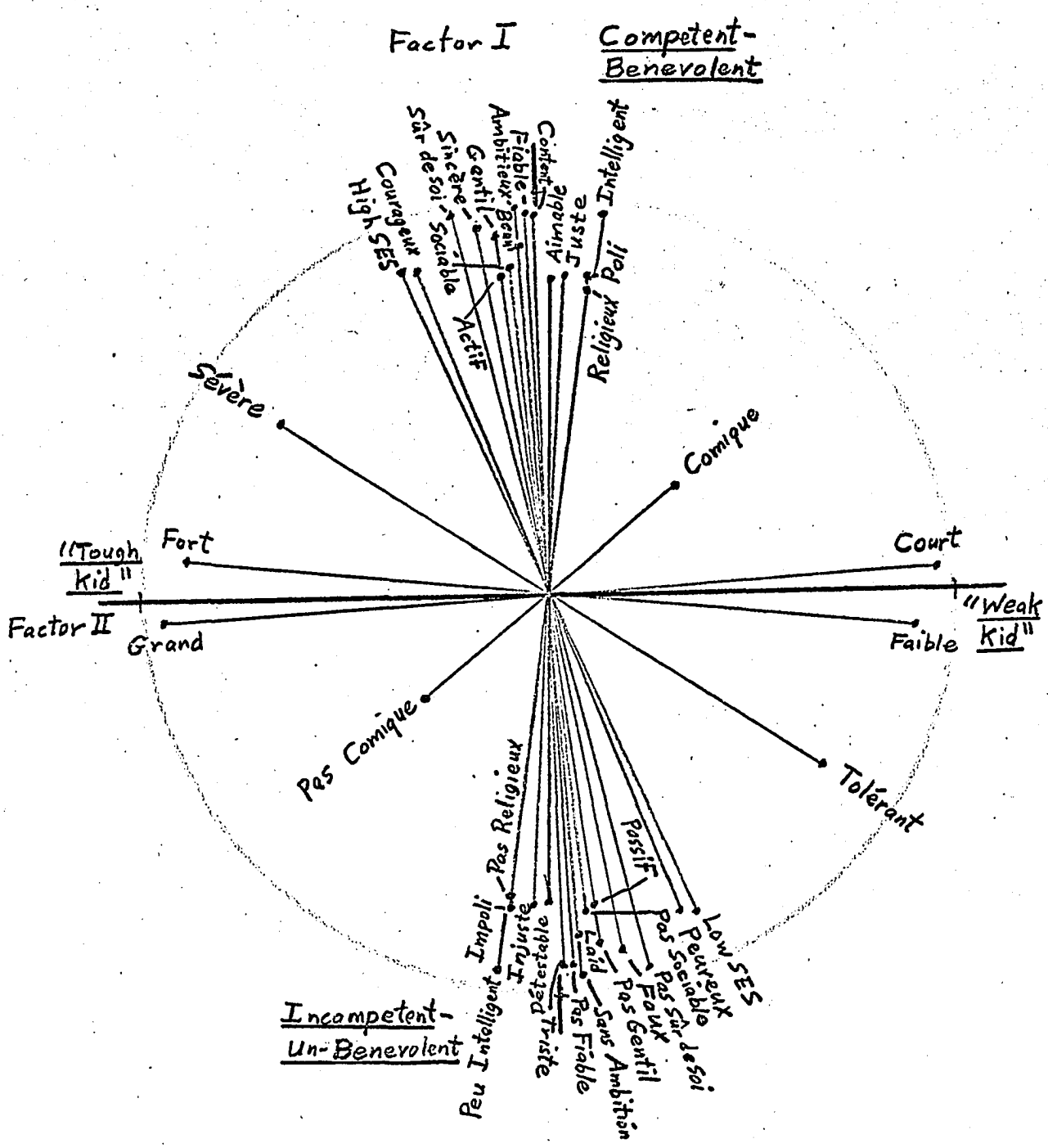
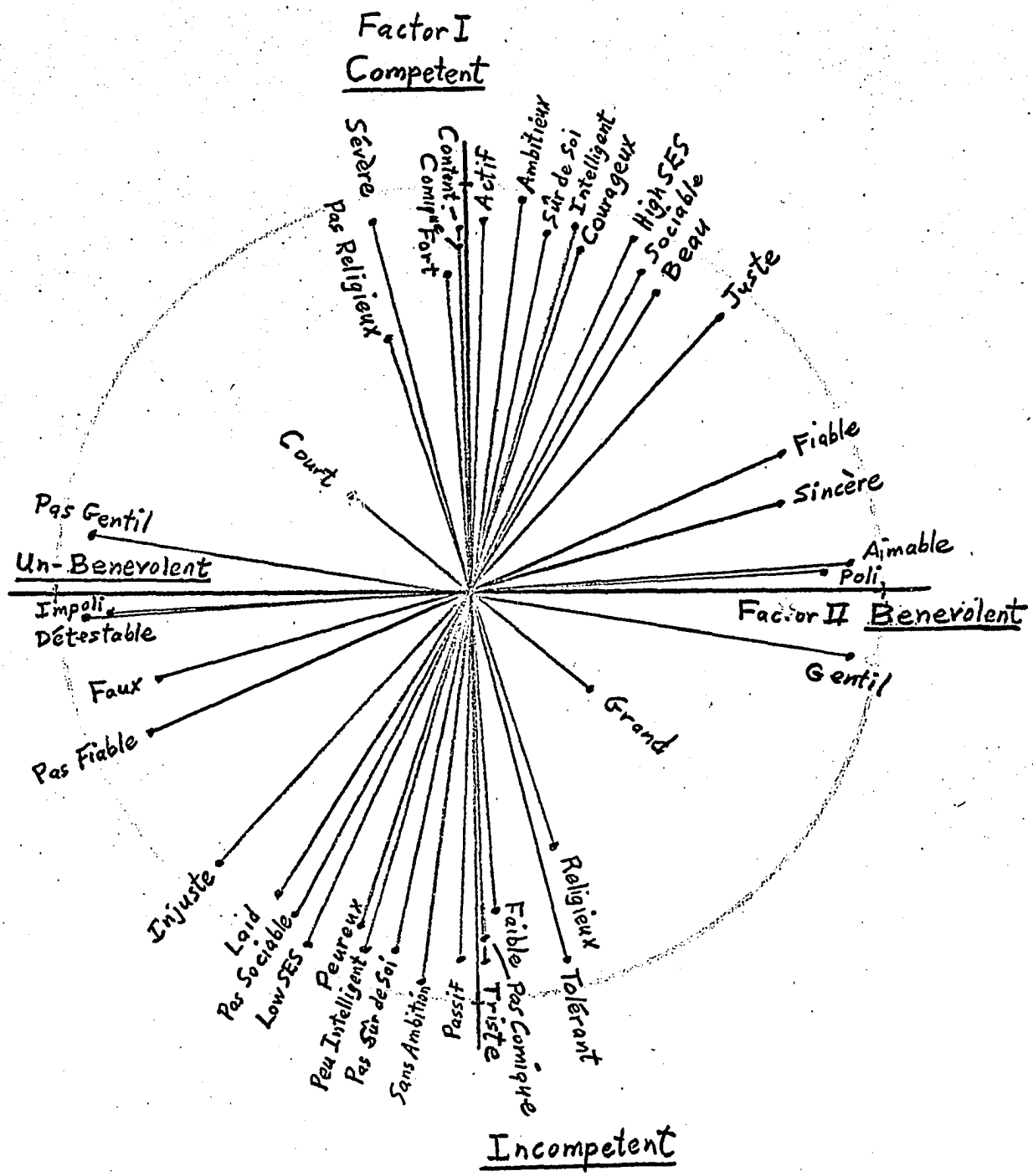


Figure 50. Graph of the Rotated Factor Pattern for the Personality Adjective Ratings Given Son Speakers by Linguistic Judges



also the linguistic judges have moderately high agreement in the ratings they assign speakers on this dimension. Schools 1 and 2 have especially high agreement on this dimension. They also have very high agreement on the "tough kid - weak kid" dimension (Factor II), in fact much more agreement than any other two rater groups have had on the secondary factor throughout this study (compare to Tables 16 and 25). Schools 1 and 2 have much less agreement with School 3 on the second factor and therefore are probably judging the speakers on a somewhat different basis than is School 3.

From the factor patterns for each school, they do seem to be using the dimensions differently. Physical size (grand, court) is much more important to School 3 raters in this "tough kid - weak kid" dimension than it is to Schools 1 and 2. For School 1 it seems to be more of a "tough-mindedness" than a physical toughness, since they include sévère - tolérant but not grand - court. Although sévère doesn't enter into the dimension for School 2, fort - faible for them also seems to be more a quality of mind than a physical quality.

The comparison of the patterns for the three groups suggests that physical size is a more important dimension of judgment for the lower SES raters from School 3 than it is for School 1 and 2 raters, suggesting that masculinity is a rather important value for School 3 boys. This converges very well with the evidence put forth earlier that "masculine motivation" is expressed more in the speech of lower SES males (and also lower SES females to some extent) than it is in the speech of those of high SES.

In Chapter III it was suggested that one weakness of this study is that if adjectives other than the ones chosen for this study were employed, perhaps the "implicit personality theories" of the raters as expressed through their ratings would turn out differently. That is, perhaps the factors obtained may be at least partly a result of the adjectives used. This may be true to some extent, but a comparison of the "implicit personality theories" expressed by the raters for fathers, mothers and sons demonstrates that they are able to express quite different dimensions of judgment with these adjectives, according to the kind of persons being judged. Competence seems to be a primary dimension in each case (which may be a result of the adjectives used). However the young boy raters use benevolence as the second dimension for father speakers but they judge mother speakers according to how stern or lenient they are as disciplinarians, and their second factor for judging other boys is expressive of how "tough" or "weak" those other boys are. The sensibleness of their differential choice of second factors for these three kinds of people is compelling. The factors make sense in the perceptual situations in which they are used. Even more compelling is the fact that the more mature linguistic judges (half of whom are female) do not use the "discipline factor" for mother speakers nor the "tough kid" factor for son speakers, but they use the same competence and benevolence factors for these speakers that they and the young boys use in rating father speakers. This is what would be expected, since the more mature linguistic judges wouldn't perceive mothers and sons in the "discipline" or "toughness" role relationships in which teen-age boys would.

In a study of how graduate business students perceive one another, Smith, Pedersen, and Lewis (1966) used a multidimensional scaling procedure in which no adjectives were given, but the raters simply evaluated pairs of stimulus persons as to the degree of similarity or difference and the dimensions were then named according to the objective differences between stimulus persons (grade point, personality test scores, etc.) with which they correlate. The major dimension that emerged was one of "competency," with the secondary dimensions having to do with "social interest and self understanding," "aggressive self-interest" and "group maintenance." They identify their dimensions as being similar to the two major dimensions found by Jackson, Messick, and Solley (1957), the major factor being related to "theoretical - intellectual" interests and abilities, and I.Q. scores, and the second one centering around "friendship" abilities. The competence and benevolence factors of this thesis are also very similar to these two dimensions, and it seems from these studies and others (Schutz, 1958; Burke and Bennis, 1961; and Osgood, 1957) that the competence and benevolence factors of this thesis are not a result of the adjectives used, but are rather the two basic dimensions of person perception in at least two cultures. It will be noted from this thesis that although the second dimension is altered when boys are perceiving other boys or adult women, the first dimension is always primarily competence.

Notice in Table 33 that this second factor (benevolence) in the judgment of son speakers by the linguistic judges is not very highly

correlated with the second factors ("tough kid - weak kid" dimension) for the three schools, and is even negatively correlated with Factor II of School 3's ratings. This means that they are not only using different adjectives to describe speakers on their second factor of judgment, but they are also judging on a different basis, especially different from that of School 3. This is not the case on the first factor. All of the inter-correlations between rater groups are quite high, indicating that the rater groups are using the same basis of judgment on this factor. The linguistic judges express this judgment only in competence adjectives, while those from the three schools express it in benevolence adjectives as well as competence ones, but all groups are perceiving the same differences among speakers. On the second factor, Schools 1 and 2 are using the same basis of judgment and are expressing it in much the same way (on about the same adjectives). School 3 seems to be using a different basis that is more related to physical size (as they detect it from speech). The linguistic judges are using a still different basis that is only slightly related to that used by Schools 1 and 2 and negatively related to the one used by School 3. It appears that Schools 1 and 2 are using a basis that is halfway between the "physical size" basis of School 3 and the basis used by the linguistic judges on Factor II.

The differences among rater groups in their ratings of religieux also show up in the ratings of son speakers. The linguistic judges consider religiousness to be highly related to incompetence for son speakers, just as they did for mother and father speakers. School 1

also sees religiousness as being linked to incompetence in the son speakers as it was in the ratings of their mothers, but they link it to benevolence for father speakers. (For fathers, School 1 raters consider religiousness to be unrelated to the competence dimension.) School 2 sees religion as being linked to weakness (Factor II) in boys and incompetence (Factor I) in men. They consider religious mothers to be stern disciplinarians and somewhat less competent and less altruistic. School 3 raters (the lowest in SES) seem to have the most favorable attitudes toward religion. They consider it to be linked to competence in boys, benevolence in men, and leniency on the discipline dimension for adult women.

Personality Judgments as Related to Background Variables.

Table 34 gives the statistical comparisons of the average ratings received by each SES Category of son speakers from all three groups of raters. Considering the total amounts of variance accounted for by the family SES classification, it appears that SES does not predict the received ratings of sons as well as it does those of fathers (see Table 4), but it does predict the ratings of sons somewhat better than it does those of mothers. The speaker orderings in particular, are more predictable from SES for father speakers than for mothers or sons: contingency tables are significant for fourteen of the twenty adjectives for father speakers, for only four in the case of mother speakers, and none in the case of son speakers.

The major SES difference for father speakers was between the two upper SES categories (A and B) and the two lower SES categories (C and D). For mother speakers the educational level comparison between those with high school and those with university, and the comparison of these two groups with mother speakers of less education were the best predictors of received ratings. On most adjectives the high-school educated mothers were rated highest, even higher than those with university. For son speakers the major difference is between the aristocrats and all other SES groups with the aristocrats being rated much higher. In fact the aristocratic son speakers are much more similar to the Continental French son speakers in their received ratings than they are to the French Canadian Category B sons (who are of similar Blishen SES level).

Table 34. Personality Ratings of Son Speakers Analyzed According to Their Family SES Levels and Countries of Origin

	Upper-class French vs. Upper-class French Canadians				Groupings According to Speakers' Family SES Levels											
					total	AB vs. CD			A vs. B				C vs. D			
	French	A+B	%v	X2	%v	A+B	C+D	%v	X2	A	B	%v	X2	C	D	%v	X2
1) Future SES	2.9	***	3.6	.31	.57	3.6	***	4.3	.37	3.1	***	3.8	.18	4.2	4.4	.02	
2) Intelligent	2.6	***	3.6	.28	.35	3.7	***	4.5	.23	3.0	***	4.0	.12	4.4	4.6	.00	
3) Actif	2.8	***	3.5	.09	.44	3.5	***	4.4	.19	3.5	***	4.0	.25	4.3	4.4	.00	
4) Juste	3.5	*	3.8	.15	.27	3.8	**	4.1	.12	3.5	***	3.9	.15	4.1	4.0	.00	
5) Sincère	3.0	*	3.3	.05	.47	3.4	***	3.8	.20	2.9	***	3.6	.24	3.7	*	4.0	.03
6) Beau	3.5	**	3.8	.06	.41	3.8	***	4.5	.26	3.3	***	4.1	.14	4.4	4.6	.01	
7) Comique	4.0	***	4.5	.16	.34	4.5	***	4.8	.13	4.0	***	4.7	.21	4.8	4.8	.00	
8) Courageux	3.8	***	4.3	.13	.30	4.3	***	4.7	.11	3.9	***	4.5	.13	4.5	***	4.9	.06
9) Sûr de soi	3.0	***	4.4	.35	.31	4.4	***	5.0	.09	3.6	***	4.8	.15	4.7	***	5.4	.07
10) Aimable	3.1		3.2	.00	.46	3.2	***	3.7	.38	3.0	**	3.3	.08	3.7	3.7	.00	
11) Fiable	3.2	*	3.4	.07	.51	3.5	***	4.0	.36	3.1	***	3.6	.15	4.0	3.9	.00	
12) Sociable	3.3	***	3.8	.34	.24	3.8	***	4.3	.19	3.6	**	4.0	.05	4.3	4.3	.00	
13) Grand	4.2		4.4	.00	.11	4.4		4.4	.00	3.9	***	4.6	.11	4.3	4.4	.00	
14) Ambitieux	2.6	***	3.4	.39	.34	3.4	***	4.0	.22	2.9	***	3.6	.10	3.9	*	4.1	.02
15) Tolérant	4.2		4.2	.00	.42	4.2		4.0	.04	4.5	***	4.0	.35	4.1	3.9	.03	
16) Gentil	2.9		3.1	.11	.24	3.1	**	3.4	.19	3.0		3.2	.05	3.4	3.4	.00	
17) Religieux	4.5	**	4.1	.45	.01	4.1		4.1	.00	4.2		4.1	.01	4.1	4.0	.00	
18) Fort	4.0	*	3.7	.06	.11	3.7		3.9	.02	3.5	*	3.8	.06	3.8	4.0	.03	
19) Poli	3.3	***	3.8	.51	.25	3.8	***	4.1	.25	3.7		3.8	.00	4.2	4.1	.00	
20) Content	2.9	***	3.5	.20	.32	3.5	***	4.0	.19	3.1	***	3.7	.13	3.9		4.0	.00

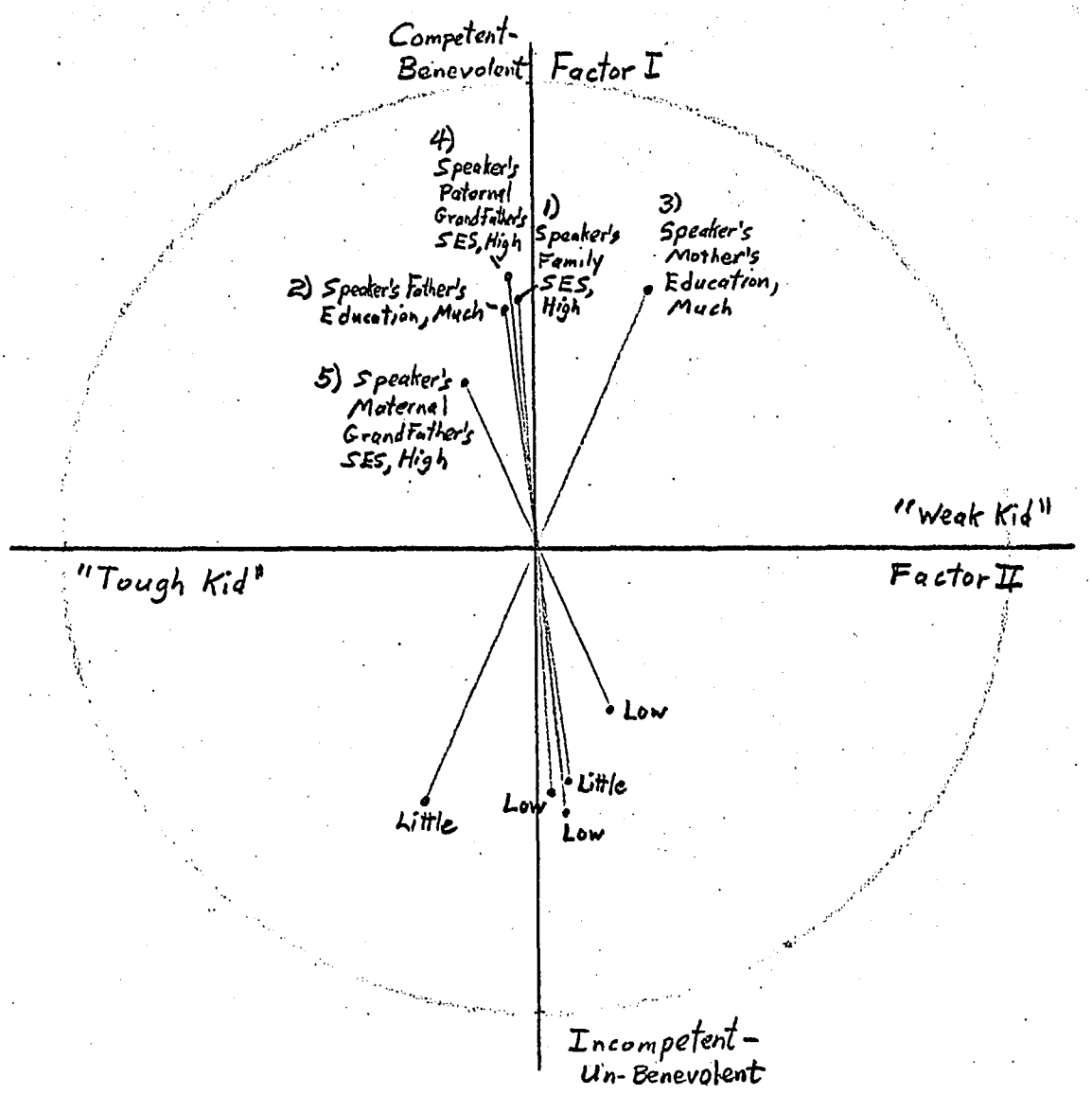
The son speakers from France are rated higher than the combination of the SES groups of French Canadian sons (A and B) on sixteen of the twenty adjectives, but when the speakers from France are compared to aristocratic son speakers only (the table for this comparison is not included in the thesis) the differences are significant on only eight adjectives and the amount of variance accounted for on each of these is very small, showing that the aristocratic sons are perceived much more like the Continental French sons than are the Category B French Canadian sons.

Table 35 gives the statistical comparisons of son speakers grouped according to their paternal grandfathers' SES levels. On the speech variables, paternal grandfathers' SES accounted for more variance in son speakers' received ratings than any other background variable. It accounted for about twice as much as son speakers' family SES levels. The contingency tables for prediction of speaker orderings by paternal grandfathers' SES levels are significant for five adjectives (aimable, fiable, gentil, poli) and for the estimate of future SES of the speakers. The contingency tables for each of these fit the pattern shown in Figure 44. Figure 51 shows how each of the five background variables correlate with the two factors for the personality ratings of sons by the total group of raters. Son speakers' family SES levels, their fathers' educational levels, their mothers' educational levels and their paternal grandfathers' SES levels all correlate about equally well with their factor scores for competence - benevolence. The correlation is somewhat less with their

Table 35. Personality Ratings of Son Speakers Analyzed According to Their Paternal Grandfathers' SES Levels

	Groupings According to Speakers' Paternal Grandfathers' SES Levels								
	total	B vs. CD				C vs. D			
	%v	B	CD	%v	X2	C	D	%v	X2
1) Son's Future SES	.41	3.3	*** 4.1	.41	**	4.1	4.2	.00	
2) Intelligent	.23	3.3	*** 4.3	.23		4.3	4.2	.00	
3) Actif	.17	3.2	*** 4.2	.14		4.2	*** 3.8	.03	
4) Juste	.20	3.6	*** 4.0	.18		4.1	3.9	.02	
5) Sincère	.23	3.2	*** 3.8	.23		3.8	3.7	.00	
6) Beau	.27	3.5	*** 4.4	.27		4.3	4.5	.00	
7) Comique	.07	4.4	** 4.7	.07		4.7	4.8	.00	
8) Courageux	.11	4.1	*** 4.7	.11		4.6	4.8	.00	
9) Sûr de soi	.24	3.8	*** 5.0	.23		4.9	* 5.2	.01	
10) Aimable	.29	3.1	*** 3.6	.28	**	3.6	3.5	.01	
11) Fiable	.35	3.2	*** 3.9	.35	**	3.9	3.8	.00	
12) Sociable	.15	3.7	*** 4.2	.15		4.2	4.1	.00	
13) Grand	.03	4.6	** 4.3	.03		4.3	4.4	.00	
14) Ambitieux	.28	3.0	*** 3.9	.28		3.8	4.0	.00	
15) Tolérant	.07	4.3	* 4.0	.07		4.0	4.0	.00	
16) Gentil	.40	2.9	*** 3.4	.40	**	3.3	3.5	.00	
17) Religieux	.00	4.0	4.1	.00		4.1	4.1	.00	
18) Fort	.00	3.9	3.8	.00		3.8	3.8	.00	
19) Poli	.50	3.5	*** 4.1	.50	**	4.1	4.2	.00	
20) Content	.36	3.1	*** 3.9	.36		3.9	3.9	.00	

Figure 51. Graph of the Correlations Between Background Variables and the Factor Scores for Ratings of Son Speakers



maternal grandfathers' SES levels. Son speakers' mothers' educational levels correlate very slightly with their received scores on the second factor, with those whose mothers are less educated tending to sound like "tough kids."

Within-family comparisons. Up to this point most of the analyses that have been made of father speakers, mother speakers and son speakers could have been carried out with separate samples of speakers of each type, without the speakers of each type necessarily coming from the same family as they actually did in this study. However, the table of inter-correlations between the performance of the sons and that of each of their parents on each linguistic variable (Table 32) made use of the kinship ties of speakers and demonstrated the extent of speech similarities of family members. It was found that the speech variables on which family members were most related were the accent variables (accent, articulateness, pronunciation, intonation, etc.) with intercorrelations between family members on these variables ranging between .37 and .77. Although it is interesting that between 15% and 60% of the variance in accent variable performance is common among family members, it is also of interest that so much variance (40% - 85%) in accent variable performance is not common among family members. It would be useful now to examine the diversity of family members, to find out what background circumstances lead to a son having a more continental accent than either parent or being rated higher or lower on competence than either parent. The diversities within families in personality ratings will

be considered in this section, and the speech performance diversities will be considered in the next section.

The factor score plottings of the son speakers for their received ratings by School 1 (Figure 53), School 2 (Figure 54), and School 3 (Figure 55) are quite consistent, and are very well represented by the plottings for the combined ratings of the three schools (Figure 52). The factor score plottings from the ratings received by speakers from linguistic judges (Figure 56) correspond reasonably well to the ratings by each of the three schools on the first factor (competence) but very poorly on the second factor. (In discussing Table 33 it was pointed out that lack of correspondence between the linguistic judges and the other rater groups on Factor II ratings is very reasonable since the linguistic judges use the benevolence dimension for that factor whereas the other rater groups are using a "tough kid" dimension.)

For father speakers the received ratings on the competence factor were very consistent from one rater group to another and were also very predictable from SES level. The only exceptions to the AB - CD split (Category A and B speakers in the two upper quadrants of the factor pattern and Category C and D speakers in the two lower quadrants) were speakers D1, D2 and B1, and these were explainable by educational discrepancies. Interestingly enough the sons of speakers D1 and D2 fall into the proper category (the lower competence quadrants) for the SES level of their families in the ratings of School 1 and School 2 and those of all three schools combined. Son D1 is also in the lower group for School

Figure 52. Plotting of Each Son Speaker According to His Factor Position Received from the Total Group of Raters

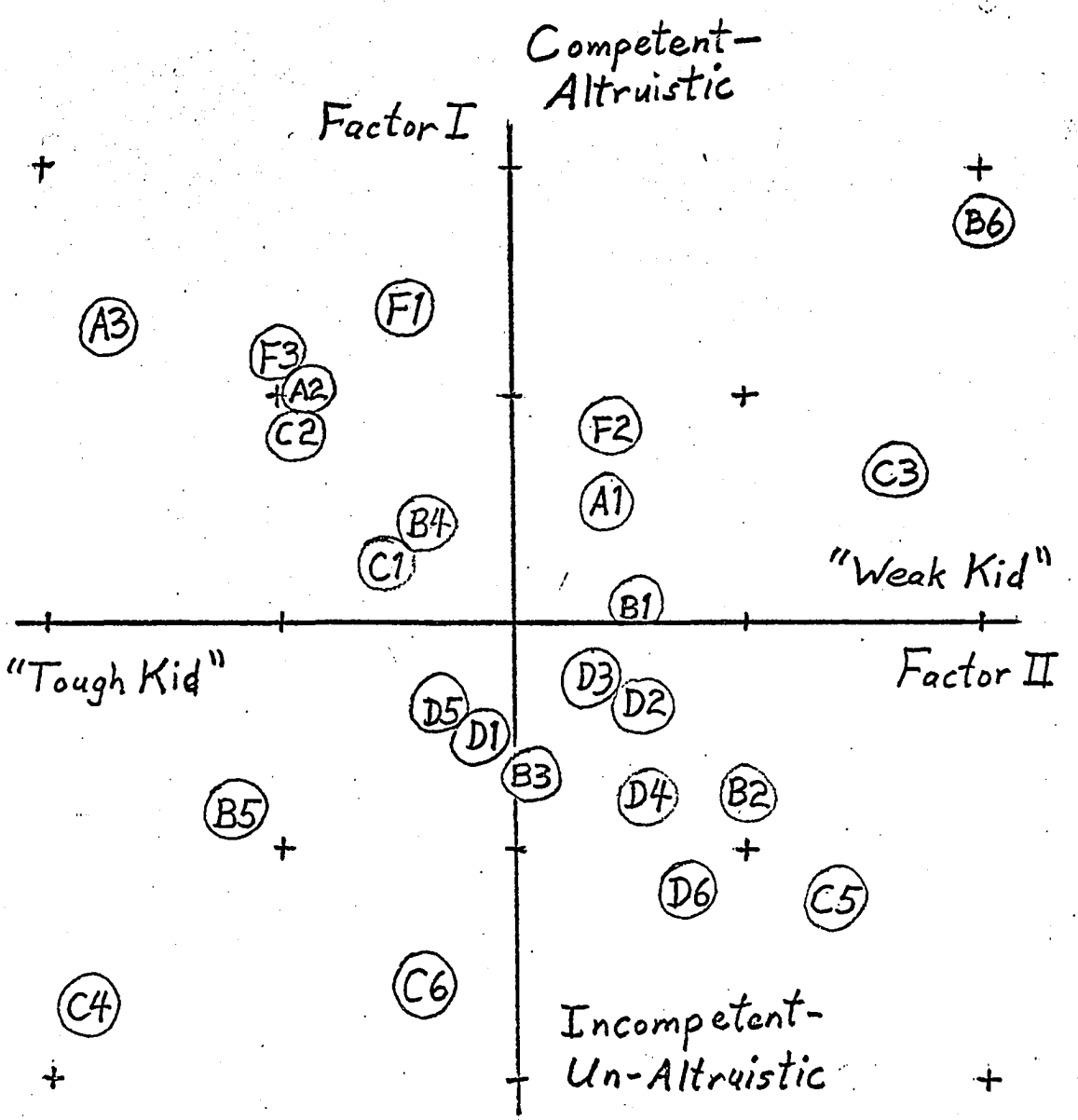


Figure 53. Plotting of Each Son Speaker According to His Factor Position Received from School 1 Raters

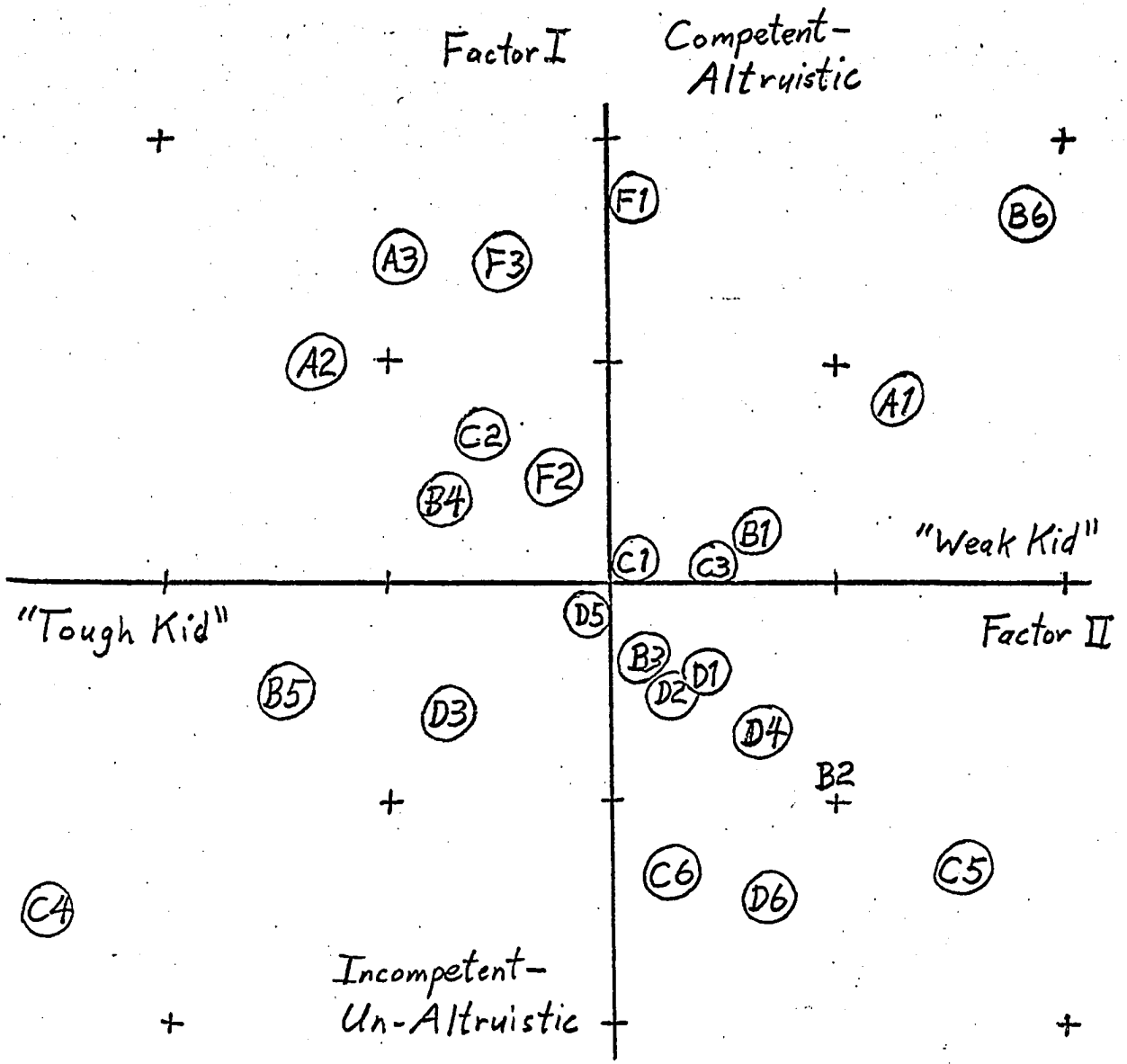


Figure 54. Plotting of Each Son Speaker According to His Factor Position Received from School 2 Raters

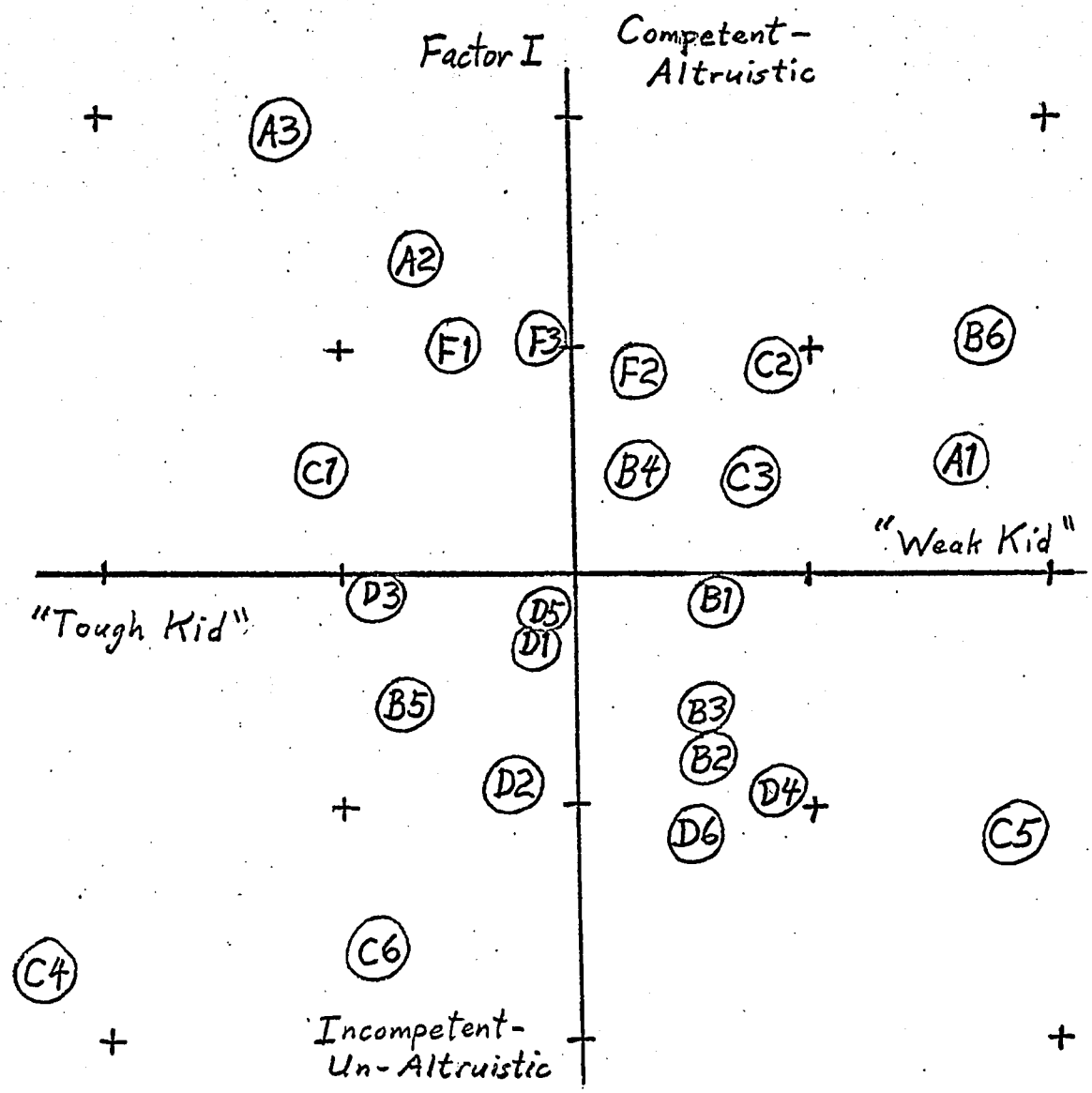


Figure 55. Plotting of Each Son Speaker According to His Factor Position Received from School 3 Raters

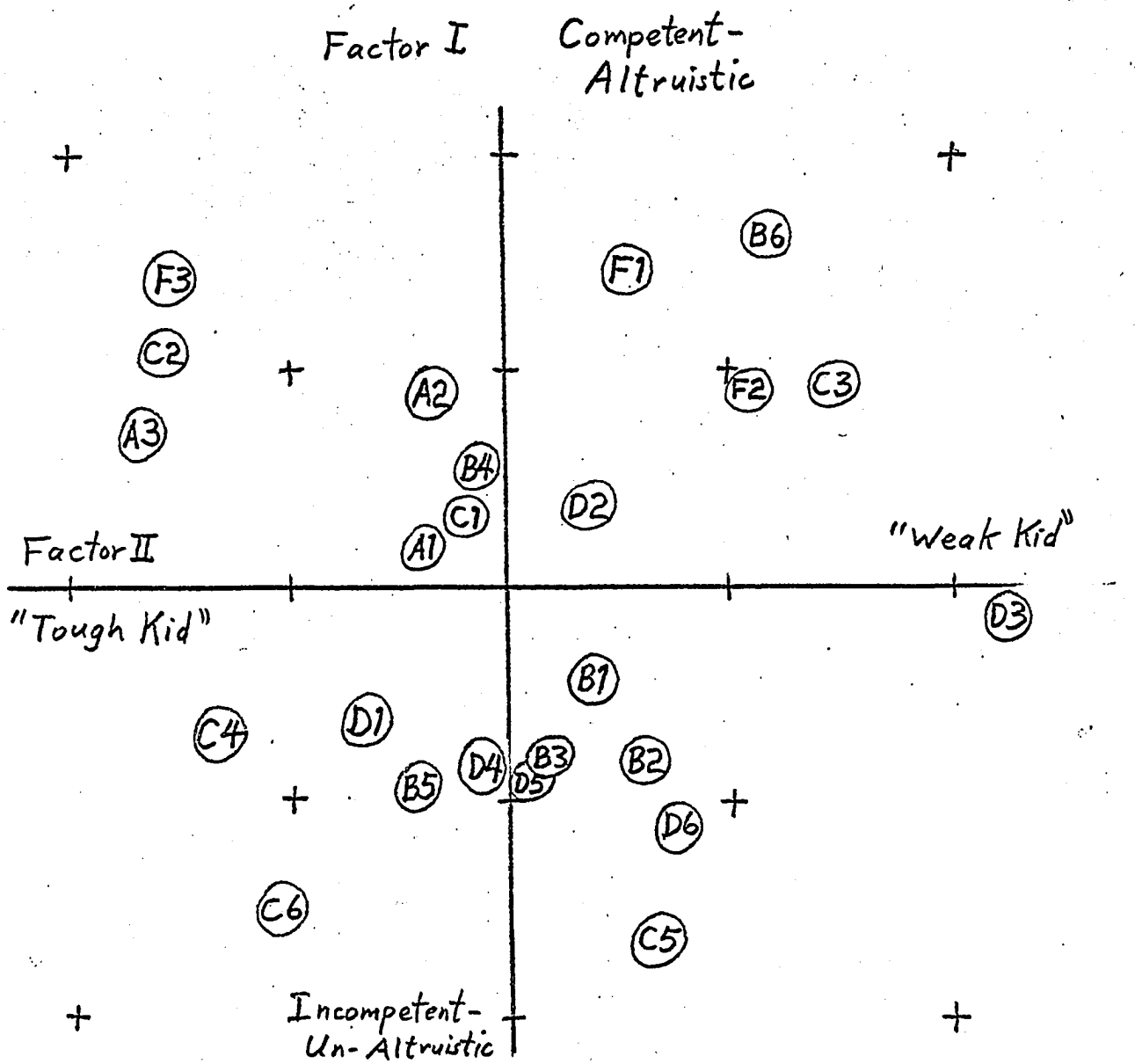
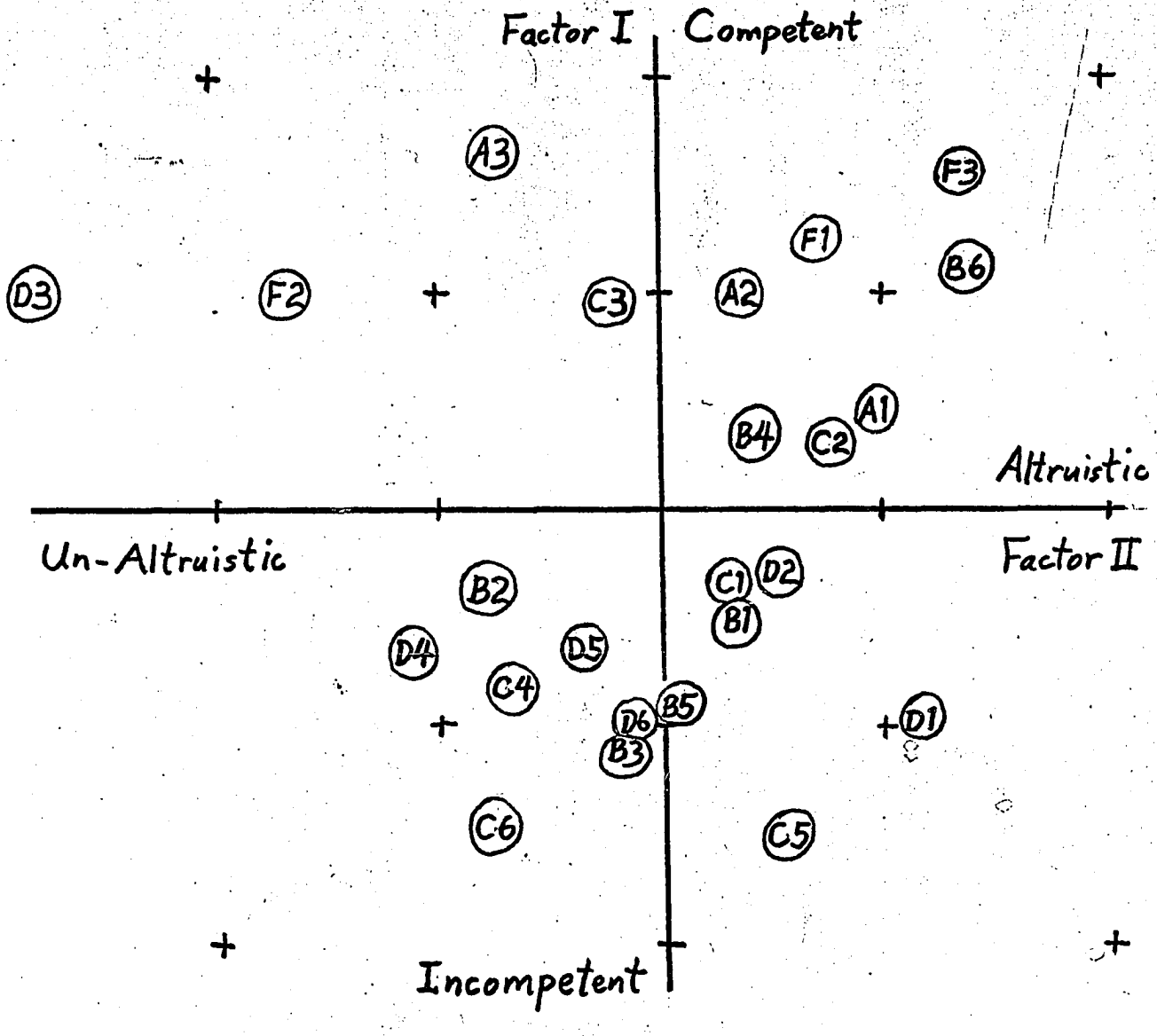


Figure 56. Plotting of Each Son Speaker According to His Factor Position Received from Linguistic Judges



3 raters, but D2 is in the upper group. Son B1 is in the SES predicted upper category in his ratings received from School 1 and in those received from the total of the three schools, but Schools 2 and 3 put him in the lower half on competence.

In general the correspondence of father speakers' competence ratings to their SES level is much greater than that of sons or mothers to their family SES level. From the factor score plottings of sons it is clear that it is mainly sons C1, C2 and C3 (higher on competence than SES predicts) and sons B2, B3 and B5 (lower on competence than SES predicts) who cause the lack of correspondence for son speakers. It seems then from the pattern of received ratings that C1, C2 and C3 are probably the most upwardly mobile of the son speakers and B2, B3 and B5 are probably the most downwardly mobile (assuming that their speech competence is indicative of their future SES levels).

The background feature that is common for C1, C2 and C3 and which differentiates them from other son speakers is that their fathers have the lowest combination of SES and education of any fathers from Area 2 (the area of School 2, see Table 1 and Table 3 of Chapter 2). Fathers D1 and D2 have lower SES than these three and B1 is just as low on education, but C1, C2 and C3 are unique in being the only fathers from Area 2 who are low on both. The average Blishen SES level for the sampled students from School 2 (the school attended by boys in Area 2) is 2.80 (see Table 3). The other Category C parents, C4, C5 and C6 are from Area 3 and send their sons to School 3 which has a Blishen level of 5.25. It looks as

though the school to which parents send their sons has a lot to do with whether they will become upwardly mobile. It must yet be determined whether the school milieu makes them upwardly mobile (or at least makes their speech sound more competent) or whether a difference in parental attitude in families like C1, C2 and D3 produces upwardly mobile attitudes in children and also results in the child being sent to a school of higher SES level. The first alternative seems more likely in view of Labov's evidence (1966, p. 266) that a child's social dialect variations are determined primarily by his friends and associates and not by his parents.

The results here suggest that perhaps upward mobility in boys is planned by their parents and is very much determined by the school they attend. However, it is still not clear why sons D1 and D2 are rated rather low in competence and yet, like C1, C2 and C3, they attend School 2. Also son speaker B6 is rated highest on competence by most rater groups and B4 is also rated somewhat high, and yet both attend School 3, the lower SES school. It may be that the associates and friends they choose within the school are the crucial determinant.

B2, B3 and B5, the three downwardly mobile son speakers (those who are rated lower on competence than their family SES level would predict), all have maternal grandfathers with Blishen SES levels two or more points higher than that of their paternal grandfathers. The fathers of these three son speakers also have Blishen SES levels two or more points higher than the paternal

grandfather. These three boys, then, are sons of the upwardly mobile French Canadian men, described in Chapter IV, who apparently marry into their reference group. (Two other son speakers, D1 and B4 also have a maternal grandfather with a higher Blishen SES level than their paternal grandfather, but the difference is only one point on the scale and the father of D1 is downwardly mobile rather than upwardly.) The evidence here adds some confirmation to the hypothesis put forth in the first section of this chapter that in French Canada there is a stabilizing regression in social class: when a man moves upward it seems likely that his son will move downward and restore the paternal genealogical line to its original SES level.

Notice that many son speakers like the three aristocrats and D4, D5 and D6 are rated about the same on competence as were their fathers, and also there has been little SES change either in their fathers' lineage or their mothers' (see Table 1). Although much of the focus in this paper has been upon mobility, it must be remembered that there are many families in French Canada who change very little. Apparently, those in the middle SES ranges change most while those in the aristocratic levels and those in the Blishen levels 6 and 7 (Category D speakers) are more stable. However, some Category D speakers in this study do seem to be mobile, for example, father speakers D1 and D2 have both come from slightly higher SES level families than the SES level of their own present occupations. Perhaps their sons will move up to a level somewhat higher than their's.

Other indicants of SES such as income and home location are probably important in finding those of the lowest level who aren't particularly mobile.

A theory of the French Canadian social system. A theoretical explanation of the operation of social stratification in French Canada emerges from the findings of this thesis. The basic postulate is that French Canadian men are much more mobile, upwardly and downwardly, than French Canadian women. Upward mobility for sons in French Canada begins with their fathers. The ambitious fathers decide that they want their sons to amount to something. The fathers themselves are hard workers since, in spite of the disadvantages of lack of education, they manage to establish themselves in the better areas of the city and their sons go to school with boys of higher SES levels than their own. The sons adopt many attitudes of the upper SES levels (as their fathers already have.) They do well in school and learn to speak somewhat better than their fathers, and they usually complete university and marry into families of higher SES than that of their parents and they themselves reach an occupational level similar to that of their fathers-in-law.

The evidence of this study indicates that the sons of men who move up socially in this way will drop, at least in the impression of competence they give through their speech, to the level of the paternal grandfather. It is not certain whether they also drop in their own eventual occupational SES level, but the evidence from the father speakers' chapter (Chapter III) indicates that SES level in men is highly related to their speech competence. It may be that the

downwardly mobiles of one generation are the sons of the upwardly mobiles of the preceeding generation. Perhaps similar events transpire in families as in nations where industriousness ultimately leads to success and easy living leads to laziness and decadence. However, this seems to be true only of families in which the father has come up from a lower level. The aristocratic sons (A1, A2 and A3) are rated as being just as competent as their fathers.

The evidence here also suggests that mobility may be a phenomenon of the middle SES groups, with the aristocrats and those from the lowest SES levels being relatively stable. The maternal genealogical line of French Canadians is also quite stable. Even though the sons of an upwardly mobile man may return to the SES level of their paternal grandfather, the daughters will not drop as much, because of the mechanisms mentioned in Chapter IV, such as the great extent to which French Canadian fathers guide their daughter's choice of husband.

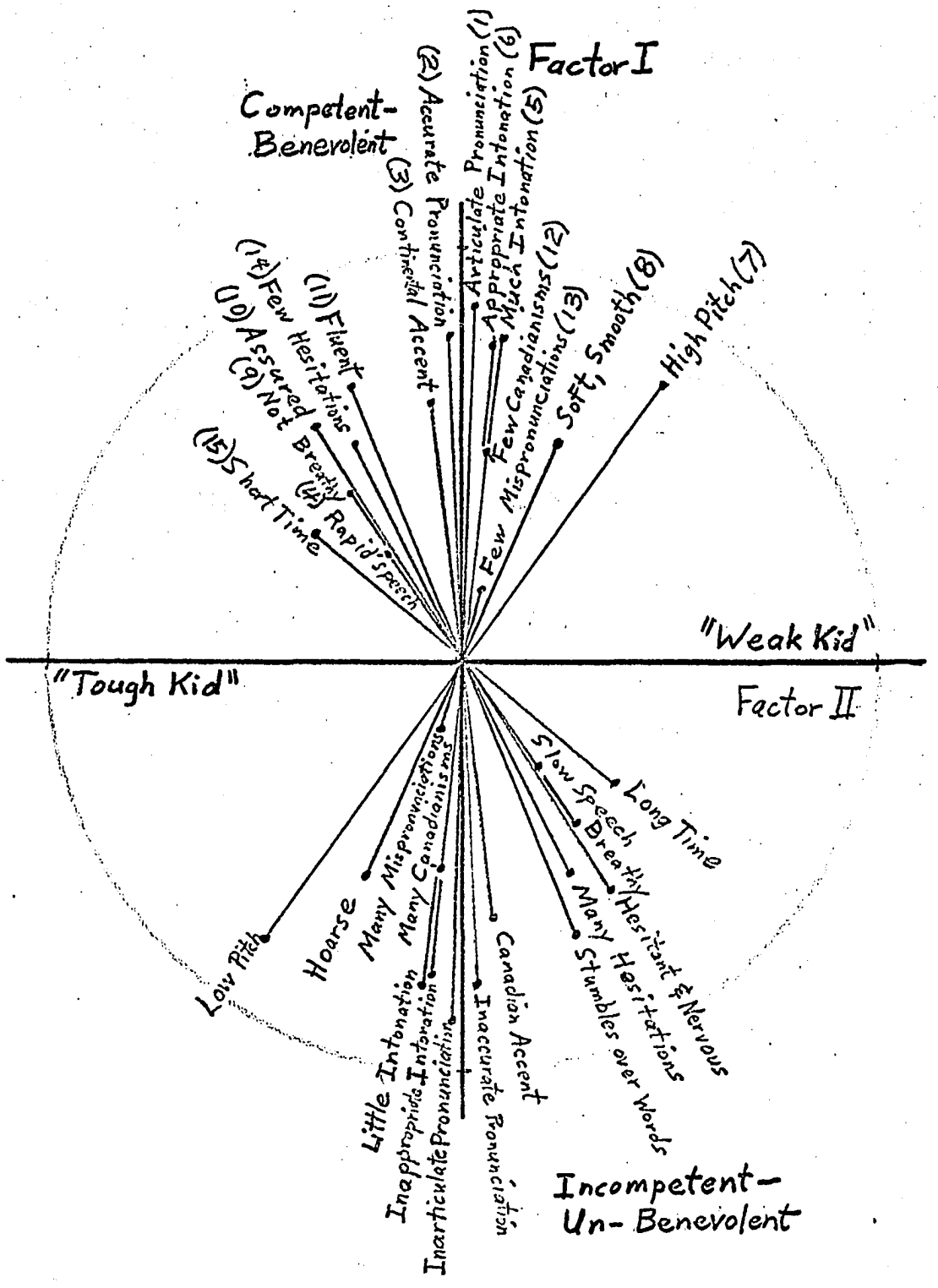
There are many questions left unanswered at this point. In order to complete the picture it is important to study carefully the women from upper SES backgrounds who marry the upwardly mobile males. Do any of them come from among the aristocracy or are they the daughters of other upward mobile males? Further research will also be needed to more firmly establish (or to refute) the theoretical ideas which have grown out of the findings of this study.

Personality Judgments as Related to Speech Variables.

The intercorrelations between the linguistic performance variables and the two personality factors (used by the raters from all three schools) in the perception of son speakers are shown graphically in Figure 57. As was the case with father and mother speakers, the accent variables and to a lesser extent the confidence speech variables correlate quite highly with the first personality factor (competence - benevolence) in the perception of the speech of son speakers. Those sons who have more accurate and articulate pronunciation, a more continental accent, and more pronounced and more appropriate intonation are rated as being higher on competence and benevolence.

Pitch and hoarseness and the competence speech variables are also related to the second factor, the "tough kid - weak kid" dimension, especially pitch. Those speakers with high pitch and soft, smooth (not hoarse) voices not only sound competent and benevolent, but also are seen as "weak kids." Those with low, hoarse voices sound like "tough kids" who are relatively incompetent and un-benevolent. This fits very well with the "masculinity motivation theory" that came out of Chapter III, in which it was proposed that boys who speak with low and hoarse voices try subconsciously to be overly masculine, spurning "sissy" speech, such as expressive intonation, articulate pronunciation, etc. Rather than being motivated to achieve in school, thay are motivated to be masculine and "tough", and as a result their speech sounds less "competent."

Figure 57. Graph of the Correlations Between Speech Variables and Son Speakers' Factor Scores from the Total Group of Raters



It is surprising that this relationship comes through so well in this study even though the "toughest" or "most masculine" boys were probably not included in this select sample of boys who are still in school by tenth and eleventh grade.

Since the "tough kid - weak kid" dimension is independent of the competence - benevolence one, there must also be son speakers who are "tough" but are still high on competence - benevolence. From Figure 57 it appears that those speakers who have confident-sounding speech (variables 9, 10, and 11) are rated high on competence - benevolence as well as "tough." The sons who sound nervous and breathy and who stumble over words are rated as being incompetent, un-benevolent and as being "weak kids."

Of the speech characteristics that were measured in this study, then, there are two that cause a boy to be rated as a "weak kid" or as a "strong kid," the pitch-hoarseness characteristics and the confidence cluster of speech variables. B6, C3, and C5 are the three son speakers who are rated most "weak" (Figure 51). B6 and C3 are also the two son speakers with the highest-pitched voices (Table 36), but C5 is one of the lowest in pitch (although his voice is one of the least hoarse). However, C5 is one of the lowest on the three confidence speech variables. B6 and C3 are judged to be weak (and also competent and benevolent) because of high pitch, and C5 is judged to be weak (and low on competence - benevolence) because of this perceived lack of confidence.

Notice from Table 36 and Figure 52 that although B1 is lower than

Table 36. Ordering of Son Speakers on Each of the 15 Speech Variables

	SPEAKER ORDER																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
1) Articulate pronunciation	B6	A3	A2	A1	C3	C2	D2	B4	C1	D6	C5	D1	B1	B5	D5	B2	B3	C4	C6	D4	Inarticulate pronunciation
2) Accurate pronunciation	B6	A3	A2	A1	C1	C2	D2	C5	B4	D5	D6	B1	C3	B2	C4	D1	D4	C6	B3	B5	Inaccurate pronunciation
3) Continental French accent	B6	A3	A2	D2	A1	B4	C2	D6	D1	C3	C1	D5	D4	C6	B5	B2	B1	B3	C5	C4	Canadian French accent
4) Rapid speech	C3	C6	D5	C4	A1	B4	A2	A3	D1	B6	B3	B1	C2	D2	D4	B2	D6	B5	C1	C5	Slow speech
5) Much intonation	B6	A3	A2	D2	A1	B4	C5	B1	B3	D1	C3	C2	C1	B2	D4	D6	B5	D5	C4	C6	Little intonation
6) Appropriate intonation	B6	A2	A3	D2	C5	C1	A1	D1	B4	B1	C2	C3	B2	B3	D4	D5	C4	B5	C6	D6	Inappropriate intonation
7) High pitch	C3	B6	A1	B4	D2	A3	B1	A2	C1	C2	D6	D4	B2	D1	D5	B3	C6	B5	C5	C4	Bass pitch
8) Soft voice	B6	A1	C5	B1	D2	D1	C1	B5	B4	C3	C2	B3	D5	C4	A3	D6	D4	C6	A2	B2	Hoarse voice
9) Not breathy	B6	C1	B5	A3	D2	C2	C6	C4	D1	B2	B1	A2	D6	B4	D4	B3	A1	C3	C5	D5	Breathy
10) Assured	B6	D2	A3	B5	C2	A2	C4	C1	B2	B4	B1	D6	D1	C6	A1	C3	D5	C5	D4	B3	Hesitant and nervous
11) Smooth, fluent speech	B6	C1	A3	D2	A2	C2	C4	B2	B4	B5	B1	A1	D6	C6	C3	D1	D5	C5	D4	B3	Stumbles over words
12) Few Canadianisms	A1	B6	C5	A3	A2	B5	D6	B2	C2	B3	B4	D4	D5	B1	D1	C4	D2	C1	C6	C3	Many Canadianisms
13) Few mis-pronunciations	A1	A2	C2	C3	D1	B6	C6	D4	D5	A3	B2	D2	B4	C4	C5	B1	C1	B5	D6	B3	Many mis-pronunciations
14) Few hesitations	A2	A3	B2	C1	D2	B6	C4	B4	B1	C2	C3	D1	A1	B5	C6	D4	D6	D5	B3	C5	Many hesitations
15) Short time for passage	C4	C1	A1	D1	B4	B2	C6	B5	A2	B6	B1	C3	A3	D5	D2	C2	C5	D4	B3	D6	Long time for passage

C5 on all of the accent variables except #3, he is higher than C5 on the competence - benevolence personality dimension. This might be a result of C5's lack of confidence, since his scores on the confidence speech variables are extremely low. Since both of these speakers are near the middle on most speech variables, except for C5's performance on the confidence ones, it may well be that the extreme characteristics of a person's speech are the most influential in determining the personality impression he makes, or that certain speech characteristics have priority over others in determining the impression. Perhaps the best way to find answers to these questions would be with "synthetic voices" by means of pattern-playback equipment. One speech parameter at a time could be varied, noting the differences the change makes in the ratings given to that "voice," and in this way the rule systems governing the formation of impressions from speech could be built up.

Chapter VI

Summary and Conclusions

In this final summary chapter, the major findings will be organized around three themes: (a) the role of SES background in person perception, (b) speech differences among SES groups, and (c) the role of speech characteristics in the formation of impressions of personality. Various suggestions for further research that follow from the findings of this study will be put forth.

SES Level and Person Perception

1. Teen-age male judges can discriminate the occupational level of adult males (father speakers) from listening to their recorded speech, but they do so with only a limited degree of accuracy. They distinguish only between those of upper (white-collar) SES levels and those from lower (working-class) levels, and their estimates of father speakers' SES levels dichotomize in a similar manner. Certain personality ratings are also dichotomous. (See pages 18 to 28.)

2. Although the estimates of father speakers' SES levels and some of father speakers' received personality ratings are clearly dichotomous (some speakers being rated relatively high while the remaining speakers are rated markedly lower with small differences between the ratings given speakers within either group and large differences between the groups), the differences among father speakers in their received linguistic ratings are more evenly distributed and continuous. Since the linguistic differences among speakers are more continuous, it is likely that the dichotomous

personality ratings are due to something in the perceptual processes of the teen-age judges. The personality ratings given to son speakers are also dichotomous, although less clearly so, but the ratings given to mother speakers are not dichotomous. It is proposed that dichotomization occurs according to the judges' tendencies to assimilate or contrast. Such processes are presumed to operate when judges can conceptualize similarities as well as differences between themselves and the speakers. Accordingly, teen-age male raters would be expected to dichotomize less in their judgments of adult female speakers than in their judments of males, adult or teen-age, as the results demonstrate. (See pages 72 to 74.)

3. The dichotomization in the ratings of father speakers by the teen-age judges is very closely related to the major difference in the actual SES levels of these speakers. In general, white collar workers (Blishen levels 1 and 2) are subjectively placed in the upper group while laborers (Blishen levels 3 to 7) are placed in the lower group, with only three exceptions. Two of these three exceptions are "over-educated" for their SES level and the third is "under-educated" for his. When SES level is corrected for these educational discrepancies, the resultant SES-educational level categorization corresponds perfectly to the dichotomy of received ratings, suggesting the superiority of Hollingshead's "two factor" index of social class. It seems, then, that the dichotomization in ratings is made on the basis of what Falardeau calls "the most universally felt social cleavage" in French Canada, the cleavage between white-collar workers and laboreres. Apparently there is something in the speech of adult male French

Canadians that clearly differentiates white-collar workers from laborers. (See pages 18 to 28.)

4. Teen-age French Canadian males seem to make personality ratings of father speakers primarily on the basis of a dimension of competence and secondarily on the basis of a benevolence dimension. The ratings given father speakers on competence correspond very well to their SES levels, whereas benevolence ratings are not systematically related to SES. However, the upper and lower SES groups do differ in their received ratings on benevolence: the ratings of speakers from the high SES group are in the middle range whereas the ratings of low SES speakers extend from extremely benevolent to extremely un-benevolent. (See pages 29 to 47.)

5. Since the "highly competent" French Canadian father speakers were rated in the middle of the benevolence dimension, there are no French Canadian adult males who are rated high on both competence and benevolence by the teen-age judges and there are none who are rated high on competence and low on benevolence. In the personality theory held by these French Canadian boys, the combination of high competence and high benevolence is apparently reserved for Continental French adult males; the Continental French father speakers were rated higher than the French Canadian ones on both competence and benevolence adjectives. In earlier research, Lambert, et al. (1960) found that French Canadian young men rate English Canadians higher than French Canadians on competence adjectives but lower on those that correspond to what is referred to here as the benevolence dimension, suggesting that high competence and low benevolence, in the personality

theory held by French Canadian young men, is reserved for English Canadian adult males. In this sense the English Canadian men are the villains for this group of French Canadian boys, while the Continental French are the heroes. (See pages 48 to 57.)

6. There is a higher degree of agreement among raters and rater groups in their judgments of competence than in their judgments of benevolence. Judgments of competence are more objective, while judgments of benevolence are determined more by the judge's values and his similarities to the stimulus person or persons. As a rule, it appears that judges rate those of their membership group higher on benevolence than they do those from "out groups," but members of their reference group are rated even higher than members of their membership group. (See pages 40 to 46 and 56 to 57.)

7. The teen-age judges used in this study use different dimensions for rating mother and son speakers than they use for rating father speakers. It seems that the dimensions used are very much colored by the nature of the raters' relationships with members of the group being perceived. In judging both mother and son speakers, competence and benevolence fuse into a single dimension. The second dimension in the perception of mothers reflects a discipline characteristic (lenient vs. stern) while the second dimension in the perception of son speakers centers around a judgment of whether the boy in question is a "weak" or a "tough kid." The finding that teen-age boys rate mothers and sons on these dimensions whereas adult judges rate them on the same competence and benevolence

dimensions which the boys used in rating father speakers sheds further light on the implicit personality theories held by French Canadian teen-age boys. Perhaps it is a mark of maturity to use the same dimensions in judging people of various age and sex, as the adult judges of this study did. (See pages 149 to 162, and 210 to 221.)

8. Boys from different SES backgrounds have different styles of rating. In general, those from the most prestigious and highest SES level school have a rating style more similar to that of the adult judges than do those from the other schools. (See pages 102 to 127, 153 to 162, and 212 to 221.)

Speech Differences Among SES Groups

1. Not only are the Continental French viewed as heroes, they are also used as models for speech by upper-class French Canadians. Gendron (1966), comparing the articulatory movements of French Canadians and Continental French, concludes that upper-class French Canadians are trying unsuccessfully to copy the continental speech. The evidence from this study supports his contentions: upper-class French Canadians are rated higher than lower-class French Canadians but lower than Continentals on accuracy and articulateness of pronunciation, amount and accuracy of intonation, and degree of continentalness of accent. They were also rated higher than lower-class but lower than the Continentals on the variables dealing with confidence as expressed in speech. It seems that the "prestige dialect" of French Canada is Continental French speech. (See pages 58 to 72, 128 to 141, and 193 to 206.)

2. The linguistic ratings (and the "competence" personality ratings) of mother speakers do not correspond as well to family SES level as do the ratings assigned to father speakers, presumably because family SES is determined by the father speakers' occupations. Instead, ratings assigned to mother speakers correspond more closely to the SES levels of their own fathers (Figure 41). Mother speakers' received ratings also correspond to their own educational levels at least as well as they do to the occupational SES level of their husbands (family SES level). (See pages 128 to 147, and 163 to 177.)

3. Those French Canadian mother speakers with high school education only are rated higher than all other educational level groups (including those with university training) on almost every dimension of linguistic competence used in this study. There are two exceptions, Canadian vs. Continental pronunciation, and accent, on both of which the high-school educated mothers are rated more Canadian than any other group. In the case of both father and son speakers, Canadian pronunciation and accent are always associated with a lack of speech competence on the other linguistic dimensions, but high-school educated mother speakers are distinctively Canadian and also very competent in their speech, in fact they receive the highest ratings of any mother speaker group on almost all of the speech variables. Lambert (1967) and also Garigue (1962) have argued that French Canadian women are the "guardians of the French Canadian culture." The results of the present study suggest that high-school educated French Canadian women are the best candidates for the guardian

role. Perhaps something in university training makes a French Canadian woman dissatisfied with her culture or at least interested in adopting a continental mode of speech. The evidence here indicates that the speech competence of university educated women suffers from their efforts to adopt a new dialect. (See pages 134 to 140.)

4. Father speakers' received speech and personality ratings do not correlate highly with their own fathers' SES levels as the ratings received by mother speakers do to their fathers' SES levels. Father speakers' ratings do, however, correlate amazingly well with the SES levels of their fathers-in-law. It is suggested that three factors could account for the very high correspondence of a man's speech competence to the SES level of his father-in-law: (a) a tendency for the French Canadian man to seek to marry someone from his reference group, (b) a tendency for the French Canadian woman to seek as a marriage partner someone who fits her "father image" (a Freudian idea), and (c) a "gating" process by which upper SES fathers only let the socio-economically appropriate young men (or those who are becoming so) associate with their daughters. The third factor is probably the most important, since other investigators have found that French Canadian women will usually not marry suitors who are not approved by their parents, and it is not likely that high SES parents would approve of a low achiever. Family SES levels for the speaker families of this study correlate more highly with the maternal grandfathers' SES levels than they do with paternal grandfathers' SES levels, confirming these ideas, and suggesting that: (a) there is more mobility (especially

downward) among French Canadian men than among French Canadian women, making women the more stable sex in French Canadian culture in that they are the ones who transmit the values of their particular SES level to the next generation, (b) it is not likely that a French Canadian woman will marry a man whose final occupational level will be below that of her father, (c) French Canadian men will tend to marry into their reference group (the SES group they will end up in) rather than marrying into the SES groups of their fathers. It should be remembered that it is the future SES level (therefore the competence level) of the suitor that is the crucial element in his marriage partner choice, not the SES level of his father. There is only a small correlation between the paternal grandfathers' SES levels and the maternal grandfathers' SES levels. (See pages 141 to 146.)

5. The father speakers in this study who have less education are found to be hoarser than those with more education. Also, Frender found that lower SES third grade French Canadian boys who were successful in school had higher-pitched voices than unsuccessful ones. According to the linguistic application of Freudian principles put forth by Rousey and Moriarty (1965), hoarseness and lowered pitch in males indicate that they are subconsciously emphasizing their masculinity. It seems that the need to be or to appear to be masculine is much greater among lower than upper SES males. This greater need for masculinity in lower SES males shows up in their deeper-pitched voices and their degree of hoarseness. Masculinity motivation in young males is expressed primarily in pitch, whereas in

older males it shows up primarily as hoarseness. (See pages 76 to 89.)

6. The hoarseness of son speakers in this study is not related to the SES level of their fathers whereas pitch is at least slightly related to fathers' SES. However, both pitch and hoarseness are quite clearly related to the SES of son speakers' paternal grandfathers, suggesting that in some way masculinity motivation is transmitted from paternal grandfather to grandson. (Pages 195 to 201.)

7. Frender also found that successful third graders used more of the upper-class intonation and expressed more speech confidence than did the unsuccessful ones, although their pronunciation was no different. These successful boys will probably be the upwardly mobile adult males of the future since they already have a good start in educational success, the vehicle of upward mobility. The adult males of this study who are upwardly mobile have the upper SES pronunciation as well as confidence and intonation which suggests that the upper-class pronunciation takes longer to achieve than upper-class intonation patterns and confident-sounding speech. (See pages 76 to 89.)

8. The son speakers' speech ratings are more related to the SES levels of their paternal grandfathers than they are to any other background variable (including the SES level of the son speakers' own fathers). Some insight into the reasons for this is given by the finding that all of the son speakers who were considerably lower on received rating than would be predicted by their family SES level were the sons of upwardly mobile fathers. Perhaps there is something of the lower-class speech retained

in the speech of the upwardly mobile males that they pass on to their sons. It does seem that the downwardly mobile French Canadian males of one generation tend to be the sons of the upwardly mobile French Canadian males of the preceeding generation. There seems to be very little downward mobility among the aristocratic speaker families (who of course can go no higher) and very little upward mobility among the speaker families in this study who are of the lowest SES level and who live in the low SES areas of the city, suggesting that mobility is a phenomenon of the middle SES ranges in French Canada, with the extreme SES groups (low and high) remaining quite stable. (See pages 196 to 206.)

Prediction of Personality Impressions from Speech Patterns

1. The competence factor in teen-age boys' perceptions of father speakers and the combined competence - benevolence factor in their perceptions of mother and son speakers are all very highly related to and predictable from the accent linguistic variables and the confidence linguistic variables used in this study (including accuracy and articulateness of pronunciation, Canadian-Continental accent, amount and accuracy of intonation, breathiness, nervousness, and fluency). Those who are rated higher linguistically are generally rated higher by the teenage boys on competence adjectives. (See pages 90 to 97, 178 to 188, and 238 to 242.)

2. None of the speech variables is highly correlated with the judgments made on the benevolence dimension for father speakers. Number of hesitations and amount of intonation are moderately correlated with benevolence, with those father speakers who have few hesitations and

much intonation being rated higher on both benevolence and competence. As suggested earlier, judgments of benevolence may depend on whether the stimulus person is similar to the rater. Much more research will be needed to discover the complex causal relationships for ratings of benevolence. (See pages 90 to 97.)

3. The judgments made of the mother speakers on the stern-lenient (discipline) dimension by the boy judges are moderately correlated with hoarseness, with the hoarse adult female speakers being rated as more stern (as well as less competent and less benevolent). As is the case with the benevolence judgment of father speakers, more research is needed to identify the linguistic cues that mediate the stern-lenient judgments made of mother speakers. (See pages 178 to 188.)

4. The "tough kid - weak kid" dimension used by the teen-age boys in their ratings of other teen-age boys (the son speakers) is moderately related to pitch, hoarseness, and the confidence speech variables. Son speakers with high-pitched voices are rated higher on the competence-benevolence dimension and as being "weak kids." Those with low, hoarse voices are rated incompetent-benevolent and tough. Those with confident-sounding speech (few hesitations, not nervous, not breathy, etc.) are rated tough as well as competent-benevolent. Those who are low on the confidence speech variables are viewed as being "weak kids" as well as being incompetent-unbenevolent. (See pages 238 to 242.)

Suggestions for Further Research

At least two major ideas for future work arise from the findings

related to the perception of persons, the first section of this chapter. The first is the suggestion that there is a higher degree of agreement among raters or rater groups in their judgments of competence than in their judgments of benevolence. Further study may support the notion that judgments of competence are more objective, while judgments of benevolence are determined more by the judge's values and his similarities to the stimulus person being evaluated. The second is the idea that judges tend to rate members of their membership group higher on benevolence than those from "out groups." Furthermore, judges tend to rate members of their reference group higher on benevolence than members of their membership group, whenever the reference group is not the same as the membership group.

A larger list of ideas derive from the section concerned with speech differences among SES groups:

1. Members of ethnically isolated minority groups within a country may tend to feel more culturally subordinate to their mother country than do members of the predominant ethnic group of a country, and this feeling may be expressed through a tendency to retain the prestige dialect of the mother country as their "standard form."

2. High-school educated French Canadian women seem in general to be the exceptions to the tendency for the more educated French Canadians to model their speech after Continental French. It may turn out that these women prefer their own dialect, values, and culture to those of France.

3. There seems to be more mobility (especially downward) among French Canadian men than among French Canadian women, suggesting that

women are the more stable sex in French Canadian culture, and the ones who transmit the values of their particular SES level to the next generation.

4. It also appears from this study that French Canadian men tend to marry into their reference group rather than staying within the SES group of their fathers, and that French Canadian women seldom marry below their fathers' SES levels, and then only one or two steps down.

5. The need to be or to appear to be masculine seems to be much greater among lower SES males than among upper SES males. This greater need for masculinity in lower SES males shows up in their speech; they have deeper-pitched voices and more hoarseness than upper SES males.

6. Masculinity motivation in young males is probably expressed primarily in pitch, whereas in older males it shows primarily as hoarseness.

7. The findings of this thesis suggest that upward mobility is expressed in speech: those who are upwardly mobile will adopt or try to adopt the speech patterns of the reference group into which they are moving. The findings also suggest that the first speech characteristics that change in the upward mobility process (and those that are easiest to change) are those that center around expressivity (intonation) and confidence as it is expressed in speech. These changes seem to take place as early as the third grade. Pronunciation and articulation are probably much more difficult to change, with this change taking place in upward mobile youths in their teen years.

8. It seems that the downwardly mobile French Canadian males of one generation tend to be the sons of the upwardly mobile males of the preceeding generation.

7. Mobility appears to be a phenomenon of the middle SES ranges in French Canada, with the extreme SES groups remaining quite stable.

Concluding Comments

This research program began with two major interests, the ways in which speech styles are linked to SES levels in French Canada, and the ways in which these various speech styles determine how French Canadians perceive and evaluate one another. It was intended that this kind of study, which combines linguistic and social-psychological approaches would produce some new ideas that would be relevant to both disciplines. After the fact, it now appears that the results are not only relevant to social-psychology and linguistics, but also to sociology, political science, and to some extent, economics.

The findings that French Canadian boys dichotomize their ratings of other boys and of adult males but not those of adult females, and that they use different dimensions in rating each of these groups contribute to our understanding of interpersonal perception. Similarly, the discovery of the ways in which French Canadian boys view English Canadians (the villians) and Continental French (the heroes) relative to their own people also gives us new insight into the process of person perception. This information is helpful in understanding many of the recent political developments in Quebec, particularly the increase in diplomatic and cultural ties with

France and the enthusiastic reception given General DeGaulle by many young French Canadians on his 1967 visit. The results of this study and others indicating that upper-class French Canadians model their speech on the Continental French give further evidence of the high status of the Continental French among the French Canadians. High-school educated French Canadian women seem to be the only French Canadians of high competence who do not take Continental French speech as a model, suggesting that perhaps they are the guardians of the French Canadian culture. The women in this sample are also much less socially mobile than the men, suggesting that French Canadian women are the ones who transmit the value systems of each SES level. These findings have application to the sociological and psychological concerns of how socialization and cultural transmission take place.

Many of the results of this study are relevant to the sociological issues of stratification and upward mobility. It seems that the motivational system that leads to upward mobility in men is seen through their speech, first as greater expressiveness of intonation and a more confident manner of speaking, and later as adoption of upper-class pronunciations. French Canadian men also tend to marry into their reference group, which will eventually be their membership group. Although these findings relate to the study of economic motivation or need for achievement, the findings which will probably have the most profound implications for an understanding of the human motivational factors in economics are the findings of pitch and hoarseness differences between French Canadian men of various SES levels. It seems that whereas the economically competent, educated

French Canadian men are oriented to achievement, the French Canadians of the lower SES levels are oriented to masculinity. More work must certainly be done to determine how much of the behavior of the lower SES French Canadians can be attributed to and predicted by this motive and the extent to which it replaces the achievement motive in those of low SES.

In examining the relationship between competence and benevolence judgments made of speakers and the speech characteristics that evoke those judgments, further insight is gained into the interpersonal perceiving process. It seems that the first step in the process is to size up the other person on a vertical dimension, i.e., to judge and estimate how intelligent, successful, or competent the speaker is relative to oneself. This seems to be a relatively objective judgment. There is much inter-judge agreement on it, and in this study where the judge only listens to the stimulus person's speech, it seems that the competence judgment is highly predictable from many vocal aspects of speech (intonation, pronunciation, accent, etc.) The second step in perceiving another person seems to be that of locating the person on a horizontal dimension of benevolence. The judge seems to be asking such questions as "How kind is he?", or "How close would I like to be with him?"[14] This dimen-

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[14] Recognizing the subjective nature of the benevolence dimension and despite the wide range of ratings given families on this dimension by the teen-age judges, this author found almost all of the participating families to be extremely high in benevolence. The warmth and kindness and the hospitality of the French Canadian families will remain one of the outstanding memories of this project.

sion is much more subjective than the competence one, with much less inter-judge agreement, and judgments on it do not seem to be highly predictable from speech. Much more research is needed to discover the ways in which personality impressions are evoked by differences in the vocal aspects of speech. Some interesting findings in this respect were obtained in this study, particularly for son speakers. For example, a boy who speaks with a hoarse, low-pitched voice will be judged as being incompetent and somewhat unbenevolent, but "tough"; and a boy with a high-pitched voice will sound competent but "weak."

Probably one of the most valuable contributions of this study is the method of plotting speakers according to the scores they receive on each of the major dimensions. This makes the judgments and the personality theories held by judges clear and graphic. The linguistic analyses of this study are crude and gross, and a more rigorous analysis of the speech samples by a qualified linguist might yield additional information more valuable than that gained up to this point. Many of the questions that were asked, such as the linguistic basis of the benevolence judgment, remain unanswered. Thus, the greatest value of this work will likely be its suggestions for better research in the future, and the value of combining the social psychological and linguistic approaches will become even more evident in the research that follows from this.

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APPENDICES

Appendix A. The Passage from Le Petit Prince (by Antoine de Saint Exupéry) Which Was Read by the Subjects in This Study

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La seconde planète était habitée par un vaniteux:

— Ah! Ah! Voilà la visite d'un admirateur! s'écria de loin le vaniteux dès qu'il aperçut le petit prince.

Car, pour les vaniteux, les autres hommes sont des admirateurs.

— Bonjour, dit le petit prince. Vous avez un drôle de chapeau.

— C'est pour saluer, lui répondit le vaniteux. C'est pour saluer quand on m'acclame. Malheureusement il ne passe jamais personne par ici.

— Ah oüi? dit le petit prince qui ne comprit pas.

— Frappe tes mains l'une contre l'autre, conseilla donc le vaniteux.

Le petit prince frappa ses mains l'une contre l'autre. Le vaniteux salua modestement en soulevant son chapeau.

— Ça, c'est plus amusant que la visite au roi, se dit en lui-même le petit prince. Et il recommença de frapper ses mains l'une contre l'autre. Le vaniteux recommença de saluer en soulevant son chapeau.

Après cinq minutes d'exercice le petit prince se fatigua de la monotonie du jeu:

— Et, pour que le chapeau tombe, demanda-t-il, que faut-il faire?

Mais le vaniteux ne l'entendit pas. Les vaniteux n'entendent jamais que les louanges.

Note.- The four underlined sentences are the ones that were played to the judges as samples of the speech of each speaker.

Appendix B, Table 1. Personality Ratings of Father Speakers Analyzed According to Speakers' Educational Levels - Ratings by the Three Schools Combined

Judged Occupational	Groupings According to Speakers' Educational Levels											
	Total	Comparison 1				Comparison 2				Comparison 3			
	%v	Un&HS	HJ&El	%v	X2	Un	HS	%v	X2	JH	El	%v	X2
SES	.71	4.1	***5.3	.68	***	3.9	**4.2	.03		5.2	5.3	.00	
Intelligent	.65	3.6	***5.2	.58	**	3.3	***4.0	.07		5.0	* 5.3	.00	
Actif	.51	3.5	***4.6	.44	***	3.3	***3.7	.04		4.3	**4.8	.03	
Juste	.38	3.6	***3.9	.29		3.5	**3.7	.08		3.8	4.0	.01	
Sincère	.51	3.1	***3.8	.44	**	3.5	**3.7	.07		3.8	4.0	.00	
Beau	.58	4.0	***5.0	.53	***	3.9	***4.3	.06		5.0	5.0	.00	
Comique	.36	4.5	***4.2r	.13		4.5	4.6	.00		3.7	***4.5	.23	
Courageux	.43	4.0	***4.7	.40	**	4.0	4.0	.00		4.5	**4.9	.04	
Sûr de soi	.58	4.0	***5.4	.51	***	3.8	***4.4	.07		5.3	5.5	.00	
Aimable	.34	3.1	**3.4	.25		3.1	3.3	.06		3.3	3.5	.03	
Fiable	.42	3.4	***3.9	.34	***	3.3	**3.6	.09		3.8	3.9	.00	
Sociable	.33	3.6	**3.8	.16		3.5	* 3.7	.06		3.8	3.9	.01	
Grand	.47	4.1	***4.7	.47	***	4.0	4.2	.00		4.8	4.7	.00	
Ambitieux	.64	3.6	***4.7	.59	***	3.4	***3.8	.05		4.6	4.7	.00	
Tolérant	.52	4.5	***4.0r	.52		4.5	4.5	.00		3.9	4.0	.00	
Gentil	.09	3.4	3.4	.00		3.3	3.5	.00		3.3	3.6	.09	
Religieux	.21	4.0	3.9	.01		3.9	* 4.1	.20		3.9	3.8	.00	
Fort	.30	3.6	***3.9	.23	**	3.6	3.5	.00		3.7	**4.1	.07	
Poli	.41	3.8	***4.1	.26		3.6	**3.9	.10		4.0	* 4.2	.05	
Content	.21	3.5	* 3.7	.03		3.4	**3.7	.05		3.4	***3.9	.12	

Note.- This table is read in the same way as Table 4.

Appendix B, Table 2. Personality Ratings of Father Speakers by Raters from School 1 Analyzed According to Speakers' Occupational SES Levels

Judged Occupational SES	Groupings According to Speakers' Occupational SES Levels												
	Total %v	AB - CD Comparison				A - B Comparison				C - D Comparison			
		A+B	C+D	%v	X2	A	B	%v	X2	C	D	%v	X2
	.73	4.0	***5.2	.73	***	3.9	4.0	.00		5.3	5.0	.00	
Intelligent	.54	3.6	***5.1	.54	*	3.4	3.6	.00		5.1	5.1	.00	
Actif	.51	3.4	***4.5	.41	*	2.8	***3.7	.09		4.4	4.6	.01	
Juste	.10	3.3	3.6	.10		3.2	3.4	.00		3.6	3.6	.00	
Sincère	.30	3.0	**3.4	.21		2.7	* 3.1	.09		3.5	3.4	.00	
Beau	.71	3.9	***5.0	.71	***	3.8	3.9	.00		5.0	4.9	.00	
Comique	.07	4.7	* 4.4r	.07		4.8	4.7	.00		4.4	4.4	.00	
Courageux	.47	3.8	***4.6	.45	*	3.6	3.9	.01		4.6	4.7	.01	
Sûr de soi	.60	3.6	***5.1	.56	***	3.3	* 3.8	.02		5.3	* 4.9	.02	
Aimable	.39	3.3	3.4	.00		2.9	**3.5	.31		3.5	3.3	.08	
Fiable	.66	3.5	***4.0	.66	*	3.3	3.5	.00		4.0	3.9	.00	
Sociable	.03	3.5	3.6	.00		3.3	3.5	.03		3.5	3.6	.00	
Grand	.81	3.8	***4.4	.78	*	3.6	3.9	.03		4.3	4.3	.00	
Ambitieux	.45	3.8	***4.6	.44	*	3.5	3.9	.01		4.7	4.6	.00	
Tolérant	.40	4.3	***3.7r	.40		4.2	4.3	.00		3.7	3.7	.00	
Gentil	.39	3.8	**3.4r	.39		3.8	3.8	.00		3.3	3.5	.00	
Religieux	.06	3.7	3.5r	.06		3.8	3.6	.00		3.5	3.4	.00	
Fort	.35	3.8	***4.4	.35		3.9	3.8	.00		4.3	4.5	.00	
Poli	.12	3.6	3.7	.02		3.8	3.5	.10		3.8	3.7	.00	
Content	.00	3.8	3.8	.00		3.7	3.9	.00		3.7	3.9	.00	

Note.- This table is read in the same way as Table 4.

Appendix B, Table 3. Statistics for Personality and Occupational Ratings of French Fathers Compared to Upper-class French Canadian Fathers - Raters from School 1

	Speakers from France Compared to All French Canadians from the Upper Categories (A and B)				Speakers from France Compared to Aristocratic French Canadians Only			
Judged	French	A+B	%v	X2	French	A	%v	X2
Occupational SES	2.9***	4.0	.74	***	2.9***	3.9	.40	*
Intelligent	2.6***	3.6	.37		2.6***	3.5	.19	
Actif	2.8***	3.4	.29		2.8	2.9	.00	
Juste	3.2	3.3	.00		3.2	3.2	.00	
Sincère	2.9	3.1	.17		2.9	2.9	.00	
Beau	3.1***	3.9	.52		3.1***	3.8	.23	
Comique	3.7***	4.7	.70		3.7***	4.8	.79	
Courageux	3.6	3.8	.01		3.6	3.6	.00	
Sûr de soi	2.7***	3.6	.48		2.7 **	3.3	.13	
Aimable	3.0	3.3	.17		3.0	2.9	.00	
Fiable	3.0 **	3.5	.59		3.0	3.3	.10	
Sociable	2.9 **	3.5	.50		2.9	3.3	.32	
Grand	3.0***	3.8	.48		3.0 *	3.6	.16	
Ambitieux	2.3***	3.6	.75	***	2.3***	3.4	.34	*
Tolérant	4.6	4.3	.82		4.6	4.2	.61	
Gentil	3.2***	3.7	.00	***	3.2 *	3.7	.00	
Religieux	4.1 *	3.7	.22		4.1	3.8	.04	
Fort	3.4	3.8	.10		3.4	3.8	.05	
Poli	2.8***	3.6	.98		2.8***	3.8	.70	
Content	3.0***	3.9	.92	***	3.0***	3.8	.49	*

Note.- This table is read in the same way as Table 4.

Appendix B, Table 4. Personality Ratings of Father Speakers by Raters from School 2 Analyzed According to Speakers' Occupational SES Levels

Judged Occupational SES	Groupings According to Speakers' Occupational SES Levels											
	Total	AB - CD Comparison				A - B Comparison				C - D Comparison			
	%v	A+B	C+D	%v	X2	A	B	%v	X2	C	D	%v	X2
	.60	3.7	***4.9	.58	***	3.4	* 3.8	.02		4.9	4.9	.00	
Intelligent	.60	3.2	***4.8	.60	***	3.1	3.2	.00		4.8	4.9	.00	
Actif	.54	3.2	***4.5	.54	***	3.0	3.3	.00		4.7	4.4	.00	
Juste	.44	3.3	***3.9	.41		3.4	3.3	.00		4.0	3.7	.03	
Sincère	.51	3.1	***3.8	.42	*	2.9	* 3.3	.05		4.0	3.6	.04	
Beau	.47	4.0	***4.9	.47	***	3.9	4.0	.00		4.9	4.9	.00	
Comique	.02	4.2	4.0	.02		4.3	4.1	.00		3.9	4.1	.02	
Courageux	.37	3.8	***4.4	.35		3.7	3.8	.00		4.5	4.3	.02	
Sûr de soi	.59	3.6	***5.0	.53	***	3.6	3.6	.00		5.2	***4.6	.06	
Aimable	.48	3.1	**3.5	.48	*	3.2	3.1	.00		3.5	3.6	.00	
Fiable	.41	3.3	***4.0	.36		3.4	3.2	.00		4.1	**3.8	.05	
Sociable	.42	3.4	***3.9	.36		3.5	3.3	.03		4.0	3.8	.03	
Grand	.53	3.8	***4.4	.53	*	3.9	3.8	.00		4.3	4.4	.00	
Ambitieux	.59	3.2	***4.4	.59	*	3.3	3.2	.00		4.5	3.2	.00	
Tolérant	.37	4.3	4.1	.20		4.5	4.2	.17		4.2	4.1	.00	
Gentil	.39	3.2	***3.7	.35		3.4	3.1	.04		3.7	3.6	.00	
Religieux	.65	4.1	4.0	.00		4.4	**4.0	.55	*	4.0	4.0	.00	
Fort	.24	3.6	3.7	.00		3.6	3.7	.00		3.5	3.8	.24	
Poli	.82	3.4	***4.3	.82	***	3.4	3.4	.00		4.3	4.3	.00	
Content	.25	3.3	***3.7	.25	***	3.3	3.3	.00		3.8	3.7	.00	

Note.- This table is read in the same way as Table 4.

Appendix B, Table 5. Statistics for Personality and Occupational Ratings of French Fathers Compared to Upper-class French Canadian Fathers - Raters from School 2

	Speakers from France Compared to All French Canadians from the Upper Categories (A and B)			Speakers from France Compared to Aristocratic French Canadians Only		
Judged Occupational SES	French 3.2	A+B 3.7	%v .96 / X2 **	French 3.2	A 3.7	%v .93 / X2 *
Intelligent	2.5	***3.2	.28	2.5	***3.3	.20
Actif	2.9	**3.2	.14	2.9	3.1	.00
Juste	3.2	3.3	.00	3.2	3.4	.00
Sincère	3.1	3.2	.00	3.1	2.9	.02
Beau	3.2	***3.9	.29	3.2	***3.9	.20
Comique	3.5	***4.2	.80	3.5	***4.3	.73
Courageux	3.7	3.8	.00	3.7	3.7	.00
Sûr de soi	2.7	***3.6	.57	2.7	***3.6	.39
Aimable	2.9	* 3.2	.90	2.9	* 3.2	.78
Fiable	2.9	* 3.3	.33	2.9	**3.5	.46
Sociable	3.1	* 3.4	.39	3.1	**3.6	.65
Grand	3.1	***3.8	.42	3.1	***3.9	.33
Ambitieux	2.9	* 3.2	.31	2.9	3.2	.16
Tolérant	4.1	4.3	.17	4.1	* 4.5	.45
Gentil	3.0	3.2	.10	3.0	* 3.4	.50
Religieux	4.6	**4.1	.46	4.6	4.5	.00
Fort	4.3	***3.6	.80	4.3	***3.6	.65
Poli	2.9	**3.4	.51	2.9	* 3.4	.34
Content	2.9	**3.3	.60	2.9	**3.3	.39

Note.- This table is read in the same way as Table 4.

Appendix B, Table 6. Personality Ratings of Father Speakers by Raters from School 3 Analyzed According to Speakers' Occupational SES Levels

Judged Occupational SES	Total %v	Groupings According to Speakers' Occupational SES Levels: AB - CD Comparison A+B	C+D	%v	X2	A - B Comparison A	B	%v	X2	C - D Comparison C	D	%v	X2
	.86	3.7	***4.7	.86	***	3.8	3.7	.00		4.7	4.7	.00	
Intelligent	.54	3.0	***4.5	.53	*	2.9	3.1	.00		4.6	4.3	.01	
Actif	.32	3.2	***3.9	.29		3.1	3.2	.00		4.1	3.7	.03	
Juste	.25	3.3	* 3.6	.25		3.0	3.4	.00		3.6	3.6	.00	
Sincère	.67	2.7	***3.5	.67	***	2.8	2.6	.00		3.7	3.4	.00	
Beau	.47	3.6	***4.5	.46	*	3.8	3.5	.00		4.6	4.4	.01	
Comique	.14	4.4	* 4.0	.11		4.5	4.4	.00		3.8	4.2	.03	
Courageux	.26	3.5	***4.2	.26		3.6	3.5	.00		4.1	4.3	.00	
Sûr de soi	.82	3.5	***4.9	.53	***	3.5	3.5	.00		5.0	4.7	.29	
Aimable	.94	2.7	* 3.1	.72		2.7	2.7	.00		3.2	2.9	.22	
Fiable	.67	2.9	* 3.4	.55		3.2	2.8	.06		3.6	3.2	.12	
Sociable	.08	3.1	3.4	.08		3.3	3.0	.00		3.5	3.3	.00	
Grand	.39	3.8	***4.7	.39		3.8	3.8	.00		4.6	4.8	.00	
Ambitieux	.59	3.2	***4.1	.59	*	3.0	3.3	.00		4.1	4.1	.00	
Tolérant	.52	4.8	***4.1	.36		4.8	4.8	.00		4.4	**3.8	.16	
Gentil	.10	3.1	3.2	.00		2.9	3.2	.10		3.2	3.2	.00	
Religieux	.51	3.6	3.4	.12		3.6	3.6	.00		3.1	* 3.5	.39	
Fort	.21	3.1	3.3	.04		3.2	3.0	.00		3.1	**3.7	.17	
Poli	.13	3.4	* 3.8	.13		3.6	3.3	.00		3.7	3.9	.00	
Content	.04	3.1	3.3	.04		3.1	3.1	.00		3.5	3.3	.00	

Note.- This table is read in the same way as Table 4.

Appendix B, Table 7. Statistics for Personality and Occupational Ratings of French Fathers Compared to Upper-class French Canadian Fathers - Raters from School 3

Judged Occupational SES	Speakers from France Compared to All French Canadians from the Upper Categories (A and B)				Speakers from France Compared to Aristocratic French Canadians Only			
	French	A+B	%v	X2	French	A	%v	X2
	2.8	**3.6	.95		2.8	**3.5	.56	
Intelligent	2.3	***3.1	.49	***	2.3	* 2.9	.17	*
Actif	2.4	**3.2	.46		2.4	* 3.1	.24	
Juste	2.6	**3.3	.68		2.6	3.0	.13	
Sincère	2.3	2.7	.66		2.3	2.8	.73	
Beau	3.1	* 3.6	.24		3.1	**3.8	.30	
Comique	4.4	4.4	.00		4.4	4.5	.00	
Courageux	3.9	3.5	.36		3.9	3.6	.06	
Sûr de soi	2.3	***3.5	.58		2.3	***3.5	.38	
Aimable	3.0	2.7	.00		3.0	2.7	.02	
Fiable	2.9	3.0	.06		2.9	3.2	.00	
Sociable	2.4	**3.1	.82		2.4	**3.3	.79	
Grand	3.5	3.8	.08		3.5	3.8	.02	
Ambitieux	2.2	***3.2	.56		2.2	**3.0	.25	
Tolérant	4.6	4.8	.00		4.6	4.8	.00	
Gentil	2.6	***3.1	.50	*	2.5	2.9	.27	
Religieux	3.8	3.6	.05		3.8	3.6	.00	
Fort	3.7	**3.1	.10		3.7	3.2	.08	
Poli	2.6	**3.4	.38		2.6	**3.6	.35	
Content	2.7	3.1	.46		2.7	3.1	.05	

Note.- This table is read in the same way as Table 4.