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STRATHY LANGUAGE UNIT

Queen’s University
Kingston, Ontario

The Survey of Vancouver English
A Sociolinguistic Study of Urban Canadian English

R.J. Gregg et al.

Edited by
Gaelan Dodds de Wolf,
Margery Fee
and
Janice McAlpine
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A Sociolinguistic Study of Urban Canadian English
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Strathy Language Unit
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In Honour of Robert J. Gregg
1912-1998
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Foreword

This book is a well-deserved testimony to Robert Gregg's tireless and meticulous work in social dialectology, particularly in the field of Canadian English. It is also a wonderful acknowledgement of the research and publications of the students and colleagues he has trained and inspired during his many years as Professor of Linguistics at the University of British Columbia. The various chapters of this book represent careful analyses, based on abundant and scientifically selected data, computed and interpreted in the most rigorous fashion. They speak for themselves.

During my twenty years at the University of British Columbia, Robert Gregg was for me not only a personal friend and an esteemed colleague, but also a linguist whom I admired. In fact, he personified the scholarship, the erudition and the knowledge, in sum, all those qualities, which I, as a person trained both in Europe and America, believe essential to the linguist. First, Robert Gregg could converse quite elegantly in several languages and could read several others. It has always been a mystery to me how some "linguists" restricted to their mother tongue, can speculate about universals of languages and make definitive statements about the nature of language. It was certainly not the habit of Robert Gregg to rely uncritically on descriptions of languages made by others. Language is made of a dual structure: sounds and content. It has not been unusual in recent years to observe linguists with graduate degrees from renowned universities unable to read phonetic transcriptions illustrating some points of a paper they were presenting. Robert Gregg was a marvellous phonetician with a fine ear for discrimination. His production, not only of various English dialects, but also of sounds from different languages amazed students and colleagues. He kept abreast of the literature in morphology, syntax and semantics. He could discuss with great learnedness topics in historical linguistics, sociolinguistics and other branches of the discipline.

Bob was not only a linguist, but also a humanist. I always admired his vast and precise knowledge of the literatures of several languages, his refined appreciation of classical music and the fine arts. He could have lectured me on Hokusai, Utamaro and ukiyo prints. However, Bob was a modest man, most generous with his time and helpful to others. He was an academic, a professor and a linguist in the richest sense of these words. After his retirement from the University of British Columbia, the Department of Linguistics was never the same. His departure was certainly among the many factors which influenced my decision to accept an offer from another university.

BERNARD SAINT-JACQUES
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Nagoya, Japan.

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Acknowledgements

All of the contributors to this volume collaborated with the late Dr. R.J. Gregg in collecting and analysing the data for the Survey of Vancouver English. There were other colleagues at the University of British Columbia who played important roles in the developmental stage of the survey and whom Gregg wished to acknowledge. These included Ruth McConnell, George Gray and Martin Meissner, professors who gave expert advice on the questionnaire and general research design; Jean Wu, who did the computer programming and training for the project; Virginia Green, the statistical analyst; and Frank Flynn, Jeff Berryman and Paul Zabloski, who solved problems related to encoding the International Phonetic Alphabet.

The Editors

The Survey of Vancouver English, conducted between 1976 and 1984, was generously supported by the Canada Council/SSHRC, the Leon and Thea Koerner Foundation and the University of British Columbia.
Introduction

Gaelan Dodds de Wolf

This volume serves as an introduction to one of the most extensive sociolinguistic surveys ever undertaken in the English-speaking world, the Survey of Vancouver English (SVEN). It is also a tribute to the enormous energy and learning of Robert J. Gregg (1912-1998), who directed the project. R.J. Gregg was deeply engaged with Canadian English for many years, as a lexicographer, phonologist and dialectologist, before he carried out this thorough documentation of the language of Greater Vancouver.

SVEN began as a small pilot project in 1976; the main survey was initiated in 1979 and completed with the submission of Gregg’s report to the Social Sciences and Humanities Research Council of Canada in 1984. Part One of this volume consists of the SSHRC report, updated and expanded. Part Two consists of articles based on the comprehensive data generated by SVEN. This database, archived at the University of Victoria, the University of British Columbia and Queen's University, will continue to provide linguists with solid evidence about the nature of Canadian English for years to come.

The aim of the survey was to characterize Canadian English (CE) and, specifically, the dialect of CE spoken in the Vancouver metropolitan area. Thus, the survey was constructed first, to find the local incidence of certain linguistic variants typifying Canadian English, second, to discover differences in the English spoken by Vancouverites in different social, age and gender groups, and, finally, to provide a scientific, statistical basis for comparisons between Vancouver English and other urban dialects within this country and in other English-speaking areas of the world. It was Gregg’s hope that the SVEN survey, with its results minutely coded and fully accessible within a computer database, would provide a workable model for a possible series of Canadian urban surveys, which, in turn, could be used to establish well-founded descriptive guidelines for Canadian usage.

To contextualize SVEN in terms of other major English dialect surveys, although SVEN’s informants were not so numerous nor drawn from as wide a region as those of Mitchell and Delbridge (1965), who surveyed 9,000 adolescent Australian school boys through brief, teacher-conducted interviews, SVEN does provide speech data from randomly-sampled informants, who were interviewed for 90 minutes or more using a 49-page questionnaire (see de Wolf and Hasebe-Ludt 1988: 56).

In its use of the Labovian status-based sociolinguistic model, R.J. Gregg’s survey may be compared with two other Canadian ones, the Ottawa survey of 100 informants, conducted by Gregg’s former student Howard Woods (1979, 1999), and Sandra

In keeping with traditional social and regional dialectology (see Gregg 1985c), SVEN employs an in-depth and lengthy questionnaire, which is administered by a fieldworker, tape-recorded and then phonetically transcribed. SVEN merges this traditional methodology with the newer, Labovian tradition in sociolinguistics, in which populations are sampled statistically, according to certain social parameters (cf. Bailey and Dyer 1992), and in which interviews are used to elicit a range of styles. Informants represent all age groups and all social classes, and interviews allow for a thorough elicitation of background information, pronunciation, and grammatical usage and lexicons, including local words. Data collected are quantified and manipulated, and hypotheses tested for validity by computer, and most importantly, a theoretical construct known as the "variable" is employed (Labov 1963, 1966; Trudgill 1974: 64). Overall, the strengths of the SVEN database then are its depth and breadth, and the ease with which data can be accessed for research purposes. Part Two of this volume testifies to the ready accessibility of the data.

The first paper in this collection, Gregg's, "The Survey of Vancouver English: Methodology, Planning, Implementation and Analysis," discusses in some detail various aspects of the survey beginning with the pilot study, including the training of team members, the choice of variables, the selection of census tract areas and informants, questionnaire development, computer methodology, the establishment of the archived database and, finally, the interpretation and statistical analysis of the collected research material.

As well as describing the rationale and methodology for the survey, Gregg's paper provides an overview of major issues in Canadian English from a phonological point of view. For example, with regard to the intervocalic voicing of [l] to [d], the behaviour of the medial (/) variables — (V)V, as in patio; (n)V, as in centre; (t)V, as in party; and (l)V as in shelter—is examined according to sociological factors or context. For these variables and certain others, such as the variables (hw), as in what; and (ju) as in tune, a report of sound change in progress is supported through the presentation of statistical tables. For the (ing) variable, a salient one in the literature of World English (cf. Wald and Shopen 1981), language use in Canada is illuminated by means of a detailed analysis of usage according to social and stylistic context. Finally, the distinctive
Canadian diphthongs in words like *type* and *house* are shown to be widespread in all social groups.

Also discussed in Part One, under the heading of Special Profile Words is the variable pronunciation of specific lexical items. A percentage breakdown is provided for the variant pronunciations of Vancouver English speakers. For example, of the twenty-seven different realizations of the variable (garage), the form preferred by most speakers is [ɡɑˈɡɑːʒə] (a spelling pronunciation = ga RAZH) at 30%, with [ɡɑˈɡɑːdʒə] ( = ga RAJ) coming second at 16%. Variants are also characterized by social group. For example, [ˈɡuəʃɨzə] ( = GROASH ries) as a pronunciation of (groceries) is a Young, Male, Group I (Low) preference. Another highlight of Gregg's article is the analysis of the usage of local words such as *saltchuck*, *Squamish* or *Saskie*, as well as general Canadian vocabulary items such as *sofa*/*chesterfield*/*couch*. Gregg's commentary on grammatical usage in relation to post-secondary education offers useful insights into current speech; of particular interest is teachers' performance.

The subsequent papers, forming Part Two of the collection, are, in nature, methodological, descriptive, analytical or experimental and are organized mainly in terms of topic or section within the questionnaire, e.g., Reading Passage (Rodman, Murdoch), Spontaneous Narrative (Hasebe-Ludt). Although most of this volume deals with phonological matters (Gregg, Esling, Murdoch, Rodman, Hasebe-Ludt, de Wolf), grammatical and lexical usage is also covered by Gregg and Hasebe-Ludt, and attitudinal research by Richards and Gregg. Both early and later papers from the four initial researchers (Gregg, Murdoch, de Wolf, Hasebe-Ludt) and one consultant (Rodman) are included in the collection. All of the contributors have participated in some way in this study of Vancouver English.

The first paper in Part Two, Murdoch's "Visual-Aural Prompting in the Vancouver Survey Questionnaire," concentrates on a relatively new method of elicitation involving the use of pictures and aural prompting. This method results in a particularly informal style (cf. Kinloch 1971). Murdoch isolates this contextual style using (VvV) data, thereby illustrating the importance of this less formal speech register in the Labovian format.

In "Reading Passages and Informal Speech," also by Margaret Murdoch, data from the pilot survey are used to question the traditional assumption about the formality of reading style (cf. Labov 1966; Trudgill 1974) in Labov's elicitational framework. Hypothesizing that an informant's reading style might depend on the nature of the passage read, Murdoch designed an informal piece for the survey that was written in familiar style. Her results for the variables (VvV) and (ing) indicate that her research hypothesis was accurate for Vancouver English (see also Woods 1979, 1999).

Using a uniquely designed methodological test of stylistic variation in reading passages, Liita Rodman, in "Reading Style," reports on the effect of the elicitation context. The variable (VvV) is studied across a range of styles, including the least formal—the continuous casual speech of Spontaneous Narrative. The results of the Rodman
experiment suggest that the range of register variability in a passage read aloud, even in a single dialect area, is wide. This leads to the conclusion that investigators need to be particularly cautious in designing this aspect of a questionnaire in a Labovian framework.

Dealing with unstructured casual speech is Hasebe-Ludt's "Spontaneous Speech in the Survey: An Overview of the Analysis of the Phonological, Syntactic and Lexical Variables." This interpretation of the Spontaneous Narrative data provides illustrations of informants' "normal" colloquial register. Hasebe-Ludt notes distinguishing features of male and female speech and preferred pronunciations by social group for certain of the phonological variables in casual speech. A comparison of replies from the structured grammatical section of the questionnaire with similar occurrences in Spontaneous Narrative shows some divergence between actual and reported speech. Further findings indicate the importance of gender in the selection of lexical items or local words.


De Wolf's "Accent and Prestige in Canadian English: The Pronunciation of Lexical Items" compares data from both the Vancouver (Gregg 1984) and Ottawa (Woods 1979) surveys. De Wolf addresses the results of statistical analyses, according to regional and social parameters, of eight variant pronunciations in Canadian English (e.g., of genuine, schedule, and often). While de Wolf shows that a prestige pronunciation, based on high socio-economic status, often coincides with majority

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1 According to de Wolf and Hasebe-Ludt (1988: 57), "One of the unique features of the SVEN questionnaire and of the interview structure was the high success rate in creating an informal setting in which the informant was able to relax and come as close as possible to an everyday speech situation within the formal constraints of a structured interview. This was particularly evident in three of the twelve sections of the questionnaire, namely the ones entitled Background Information, Questions About Vancouver and the Spontaneous Narrative proper. Despite the position of the Background Information as the first section of the interview, it elicited a large amount of spontaneous, informal speech owing to the expansive questions on informants' family history, cultural interests and opinions regarding radio, TV and so on, to which most informants responded with enthusiasm and eloquence, providing us with a large number of continuous spontaneous speech sequences."
preference in each city, it would also appear that age, indicating change over time, is important (cf. Bynon 1977; de Wolf 1988).

In her third and final contribution to this collection, "Are the Traditional Canadian Diphthongs on the Move?" Murdoch raises a new-old issue, that of lexical diffusion. Murdoch's analysis of SVEN data for the two Canadian diphthong variables, (au) and (ei), each in two phonetic environments, indicates that one particular lexical item, perhaps through collocational influence, shows movement away from the traditional variant form (cf. also Chambers and Hardwick 1986).

In a second paper comparing speech data from Vancouver and Ottawa (thus from two regions at opposite ends of the general Canadian urban dialect area) "Evidence for Linguistic Change in Urban Canadian English," de Wolf explores the importance of age in signifying change in apparent time for both phonological and grammatical variables (Labov 1972; see also de Wolf 1992). The sociolinguistic research methodology employed here by de Wolf can be used to identify patterns associated with gender, level of educational attainment or region.

In the final paper, "Vowel Systems and Voice Setting in the Survey of Vancouver English," John Esling, in the tradition of Abercrombie (1967) and Laver (1975, 1980; see also Laver and Trudgill 1979), offers an innovative sociophonetic approach to the study of accent. By using the acoustic analysis of vowel formant patterning and long-term average spectra in phonological tokens, and by comparing results from younger informants with those of the middle and older groups, Esling evaluates changing vowel systems. Esling's research, which involves new techniques for experimental analysis, tentatively links voice quality settings to social class analysis and suggests significant differences between male and female voices in several social groups.

Building on previous surveys in B.C. (Polson 1969) and nationwide (Scargill and Warkentyn 1972), SVEN supplies sorely needed data for the description of Standard Canadian English and for regional sociolinguistic comparisons. Our hope in producing this volume is that SVEN, and the works derived from it, will inspire other, similar research both in Canada and abroad.
### Abbreviations

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<th>socio-economic groups</th>
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<td>IV</td>
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<td>age groups</td>
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<td></td>
<td>M</td>
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<td></td>
<td>O</td>
<td>60 and over</td>
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<td>types of speech task</td>
<td>MC</td>
<td>minimal contrast</td>
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<tr>
<td></td>
<td>WL</td>
<td>word list</td>
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<td></td>
<td>VA</td>
<td>visual-aural</td>
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<td></td>
<td>RP</td>
<td>reading passage</td>
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Part One: The Survey

The Survey of Vancouver English, 1976-1984: Methodology, Planning, Implementation and Analysis

R.J. Gregg

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1. INTRODUCTION

The plans for our URBAN DIALECT SURVEY OF VANCOUVER ENGLISH (SVEN) resulted from almost a quarter of a century's study of the variable forms—in pronunciation, vocabulary and grammatical patterning—that occur in the English spoken in Canada's west-coast province and that province's largest city. My earliest research on Vancouver English began in 1954, and the results were published in the Journal of the Canadian Linguistic Association (Gregg 1957a, 1957b). I initiated other projects, investigating the urban (Vancouver), provincial (BC), and national characteristics of Canadian English (Gregg 1981a, 1981b). Beginning in 1969, I also worked for over 30 years on Canadian English lexicography as a co-author—along with M.H. Scargill and the late W.S. Avis—on successive editions of the Gage Canadian Dictionary (1967-1997).

The immediate precursor of SVEN was a profitable two-year pilot survey (1976-78) which involved interviews with some 60 English speakers, born and raised in the city of Vancouver proper (1976 population, almost half a million). A further source of very useful information to our planning for SVEN was the parallel survey of Ottawa English, carried out by Howard Woods (then involved in PhD research under my supervision), who recorded and analysed the speech of 100 Ottawa anglophones (Woods 1979).

1.1 The SVEN research team

The group of research assistants specially trained for the pilot survey continued to work under my direction as the SVEN team, which comprised Margaret Murdoch, Gaelan Dodds de Wolf and Erika Hasebe-Ludt. Margaret Murdoch, the full-time fieldworker, selected the informants for both the pilot survey and SVEN and conducted and recorded all the interviews. She contributed a great deal to the planning, drafting and revision of the questionnaire. Later, she worked on the task of computer coding the results. Gaelan Dodds de Wolf and Erika Hasebe-Ludt devoted most of their time to transcribing, in narrow IPA, the taped interviews. Leanne Quirk joined the team as a part-time transcriber in the later stages of the project.

1.2 The variables

World English—the English language as spoken in various parts of the globe, including Canada—exhibits, of course, a considerable measure of uniformity. There are,
however, certain aspects of pronunciation, of the choice of vocabulary, and of grammatical patterning which vary regionally, or change with certain groups of speakers who have different socio-economic backgrounds, or even sometimes within the speech of one and the same individual in situations of varying formality. In many cases, characteristic groupings of these variable features can be viewed as "markers" of a given area, in general, or of a class of speakers within a narrower area, for example, a city. Discovering the local incidence of these kinds of "variables," was the main goal of our SVEN project. The analysis and classification of the forms which occur will allow us to determine on a scientific, statistical basis just what it is that characterizes the English spoken by the different social groups of Vancouverites, and to compare it eventually with other types of urban English inside and outside of Canada.

I should mention here that our data now make it possible to establish the following:

1. which are the "preferred" forms, i.e., those used by the majority of our SVEN population

2. which are the "prestige" forms, i.e., those used by the top socio-economic group, who have the highest level of education

3. which linguistic changes are currently in progress here

4. which group or groups are spearheading these changes

The variable features of Vancouver speech are not only a matter of purely local interest: many have a broader, provincial, and national scope and have relevance to the even wider field of World English and its regional varieties. The pioneer work of Labov (1972) for the United States and Trudgill (1974) for England is reflected throughout our project. The work of Macaulay (1977), Milroy (1980), and Horvath (1985) in other parts of the world has also interested us.

After a study of comparable socio-dialectal surveys in other urban areas and of our own experience locally, we decided to investigate 39 pronunciation variables and, at the same time, to check the way in which certain classes of sounds were handled in specific environments within words, e.g., the /l/ in the middle of words such as butter, button, twenty, party, etc., and the treatment of -ing at the end of various classes of words—verbs, nouns, adjectives, etc.—phenomena not scientifically investigated before.

To this basic group involving specific single sound changes we added a further list of about 80 selected words (once again, items of more than purely local interest) which exhibit noteworthy individual patterns of variation in pronunciation, for example, tomato, with its middle stressed syllable having the vowel /eɪ/ or /eɪ/ and schedule beginning with the single consonant /ʃ/ or the cluster /ʃk/. These words of variant pronunciation we have called "special profile words" and the variant phonetic realizations of the words we refer to as "profiles."
Investigating lexicology, we surveyed a further 25 items, alternative lexemes, conveying approximately the same meaning, items such as *chesterfield*/*sofa*/*couch*, *curtains/drapes*, *apartment/suite/flat*, *tap/faucet/spigot*, etc.

One of our aims was to help establish the degree of uniformity that exists across a wide region such as Canada. Another was to discover regional differences—that is, whether a province such as British Columbia, or a city such as Vancouver, may show a unique and characteristic pattern of preferences (which we can derive from our computer analysis and related cross-tabulations) contrasting the forms found in other comparable areas. A large measure of agreement across all regions in pronunciation, word choice, and grammatical patterning would, of course, support the concept of a General Canadian English.

### 1.3 Developing the questionnaire

The first task in SVEN, the construction of our questionnaire, took about six months; it was completed at the end of 1978.

To begin with, we knew that the variable forms we were hoping to investigate fluctuated not only between one speaker and another but even within the speech of a given individual according to the degree of formality or casualness in the situation. In order to elicit the fullest possible range of variables we finally came up with a battery of over a thousand questions divided into twelve sections of which five (namely II, III, VI, IX and X) were aimed at evoking a more or less formal speech style while seven (namely I, IV, V, VII, VIII, XI and XII) covered the informal register. Section VI was a Reading Passage which, according to the findings of previous researchers, elicits a formal style. We found after later analysis, however, that this was not necessarily so (see Murdoch "Reading Passages and Informal Speech," this volume). Our carefully constructed text (composed by Margaret Murdoch) embodied a fair amount of dialogue, including teenage conversation in an informal family setting, and many of our highly educated older informants took this as a challenge to their skills in role-playing. The result was often a very casual style of speech, which demonstrates that reading as such does not necessarily involve formality: a great deal depends on the actual content of the passage—and the histrionic talent of the reader. One section of the original questionnaire, labelled as quite "informal," was abandoned almost at the beginning of SVEN. It was judged to be redundant, as this area of enquiry was being adequately covered by sections VII and VIII. Section XII provided us with necessary supplementary information about our informants (salary, type of housing, etc.). The questionnaire is reproduced in full at the end of Part One; all the sections of the revised questionnaire are listed in their proper order on page 111.

Our experience with the pilot survey led to many modifications of the original draft of the questionnaire, and further changes were made after an evaluation of Howard Woods'
Ottawa Survey at the University of British Columbia (in consultation with Woods himself). Our colleagues in Sociology and Education put forward many helpful suggestions, which led ultimately to a comprehensive and intricately structured research instrument, geared to the purpose of reliable statistical analysis, by having the same variable features tested at least three times—whenever possible. A few minor improvements and additions were actually made during the course of the interviewing.

One aspect of the questionnaire that deserves special mention was the preparation by our fieldworker, Margaret Murdoch, of the cards with typewritten lists of words, and, more particularly, the collection of the dozens of coloured pictures, clipped from a variety of magazines, representing the range of objects whose names we wished to elicit in Section II: Visual-Aural Prompting (see Murdoch "Visual-Aural Prompting in the Survey Questionnaire," this volume).

1.4 The informants

The SVEN project not only added 240 new voices to the pilot sample, but also spread our boundaries to include the whole of the urban area known as Greater Vancouver (1978 population, about 1.25 million), i.e., Vancouver itself, as well as North and West Vancouver, as well as east to Lynn Valley and Coquitlam, south to White Rock, and northwest to Lion's Bay. This extension of territory—suggested by our colleagues in Sociology—enabled us to find many older speakers who had been born in Vancouver and had worked there but had moved to one of the outlying municipalities on retirement. We had to find informants who were born and—most important— from age 7 on, educated, within the limits of Greater Vancouver and who had never left the area for any considerable stretch of time. These informants, according to our definition, are speakers of Vancouver English.

Within the districts chosen by the computer program the approach was made by phone to prospective candidates for interview. Given the enormous extended area to be covered, the door-to-door method used in the pilot survey was out of the question. The magnitude of this task will be appreciated if we look at the figures involved. In order to come up with the 240 individuals required, over 3700 phone calls were made, 1474 respondents had to be rejected—1174 because they were not Vancouverites in our sense of the term, 22 because English was not their mother tongue, and 280 for various other reasons. In approximately 2000 cases there was no reply even when the call was repeated. In short, the acceptance rate was only 7% out of the total number of calls made.

We selected, of course, equal numbers of male and female informants, equal numbers in each of three age brackets—young (16–54), middle (35–59), and old (over 60), and equal numbers in four socio-economic classes categorized, according to their index calculated on the Blischen scale (Blischen and McRoberts 1976). The two sex groupings, three age groups and four socio-economic categories gave us a total of 24 cells for
each of which we had to find ten informants. Thus there were ten young, female, upper middle-class informants, ten young, male, upper middle-class informants, and so forth, making a total of 240 altogether, or 300 with the pilot survey's 60 included.

1.5 The establishment of the SVEN database

The establishment of our database involved in the first place the setting up, conducting and recording of all the interviews, and the transcription of the recordings. All of this constituted a long and complex process which lasted more than two years—from the beginning of 1979 to beyond the end of 1980.

To begin with, statistical reliability dictated the exigencies of a stratified random selection. As noted above, in order to create our database, we had to find informants who were born and educated within the limits of Greater Vancouver and had never left the area for any considerable stretch of time. We also had to keep an eye on building up equal numbers of male and female speakers who would fit into our three age groups and four socio-economic categories.

Once the computer had picked the districts to be investigated, the Vancouver Criss-Cross Directory proved to be an invaluable research tool for contacting prospective informants—necessarily by telephone because of the distances involved. However, even though districts with a high percentage of non-English speaking residents were automatically excluded, the overwhelming majority of those approached failed to comply with our basic requirements. At the beginning all three full-time assistants were involved in this search, but as soon as tapes began to pile up the transcribers had to switch to transcription, and our field-worker continued alone in selecting informants and making arrangements for the interviews, each of which lasted from an hour and a half to two hours or more.

All the original tapes were regarded as "master" recordings and therefore potential archive material, so copies were made from them immediately by the University of British Columbia Language Laboratory technicians for use by our transcribers. The whole transcription process proved to be a long, slow operation, taking over two years and involving patient concentration in listening to each response over and over again to ensure that every shade of sound had been accurately observed and noted down in narrow IPA script. We chose, after a judicious trial period, the Dictaphone and Sony playback machines which, being designed for endless repetition of short segments, proved to be eminently practical and efficient (de Wolf 1981).

The next major phase in SVEN was the colossal task of coding for the computer the whole vast mass of information provided by the transcriptions of the recorded interviews, and, of course, the task of finding, adapting, and implementing suitable computer programs.
The coding for most of the survey material took well over two years and was carried out by Margaret Murdoch who concentrated first on entering directly into the computer all the information just as it cropped up in the transcriptions. This procedure was followed by a "merged" version in which marginal forms were subsumed into appropriate subcategories, thus making it simpler and quicker to summarize and evaluate our results. Finally, it was found necessary to streamline all the coding in such a way that the same variant of a given vowel or consonant would have the same code number in all the different occurrences which we had elicited across many sections of the questionnaire. Thus, for example, if the second t of tomato was pronounced as a, this particular phenomenon (known as "medial voicing") was given a special code number every time it occurred throughout the whole survey. This last version of our coding we called the standardized version (Murdoch 1985).

The Spontaneous Narrative section of SVEN (Section VIII) was handled by Erika Hasebe-Ludt (1981, 1985b) who—in view of the continuous nature of the recorded conversational sections—had to prepare her material for a concordance computer analysis, using the Oxford Concordance Program. She co-ordinated her coding procedures for this casual data with Margaret Murdoch's established procedures for the formal parts of the interview.

This complex computerization of our research results proved to be a lengthy process lasting from the beginning of 1981, through 1982 and well into 1983. Once all the material was in the computer, our main aim was to come up with refinements in the programming so that all the manifestations of language variation could be identified and excerpted in straight general print-outs or cross-tabulations, based not only on our twenty-four cell groupings, which reflect the sociological factors of sex, age, and socio-economic status, but also on the whole range of speech styles or registers called forth by the twelve divisions of the questionnaire, or even, if desired, on the precise section of Greater Vancouver where the informants lived when their speech patterns were developing, and on their level of education. As a result of this detailed documentation it is possible to determine precisely to what degree our variables correlate with the sociological factors named above, as well as with a range of stylistic situations, with the different districts of our urban area, with level of education, etc. It took me two years—from 1982 to 1984—to complete a preliminary assessment of the results of our survey, deriving my analysis from the masses of computer printouts arising from our extensive database.

Finally, I would like to mention that, based on the SVEN materials, two doctoral dissertations have now been completed, one comparing SVEN's findings with those of Woods' Ottawa Survey (de Wolf 1988) and the other, reassessing the strength of British and American influences (Richards 1988). In addition, now that we have the full standardized print-out, we have deposited all our data (tapes, printouts, etc.) in the UBC Library Archives so that they will be available to linguists anywhere, and I have already notified the National Archives Canada, as well as the American Center for Applied Linguistics at Washington, D.C.
Thus our preliminary tasks involved the training of a research team, the selection of linguistic variable elements to be checked, the drafting of a scientifically constructed questionnaire to discover the incidence of these variables and the selection of a stratified random sample to include a specific number of informants in conformity with certain sociological criteria. Finally, using the collected materials, we established a comprehensive and statistically reliable database, to act as a source for valid statements about the present state and the probable course of change in the English language of this urban centre—a microcosm reflecting the macrocosm of general Canadian English (see also Gregg 1992).

1.6 Note on our computer programs

Our main computer program was SPSS, specially designed for statistical work on research in the social sciences. We also converted Woods' Ottawa material from the MIDAS package to SPSS so that comparisons between Ottawa and Vancouver could later be easily made. All these data have now been converted to SPSS-X. Finally, we chose the Oxford Concordance Program for the analysis of the SVEN casual speech material.

2. BIOGRAPHICAL BACKGROUND OF INFORMANTS

The first section of the questionnaire (page 111) comprised questions intended to elicit data about the informants' personal background. Apart from the information that we initially sought, however, we found other very useful data in the responses to this section. This section of the recorded interviews, for example, provided evidence that our fieldworker had succeeded in reassuring the speakers that they were not facing some ordeal such as a quiz or a test. As a result, we have here additional recorded material in the informal style of speech which arises when the informants feel relaxed and at their ease.

We had to confirm primarily in this section, of course, that the SVEN population fulfilled our basic requirements of stratification: half had to be males (M) and half females (F); one-third had to be in the young (Y), one-third in the middle (M), and one-third in the older (O) age-group; one-quarter of the total had to be in each of the four socio-economic status groups, designated, from lowest to highest, as I, II, III and IV. Thus the designation YM I refers to a young male or males of the lowest socio-economic group, while OF IV indicates an older female or females of the top socio-economic category.

Apart from confirming these necessary qualifications, however, our computer analysis of all the responses shows that our informants constitute a very interesting and varied cross-section of Vancouver's population as can be seen from the following figures. Note that most of the figures quoted below refer to the total population of 300
informants (including the pilot survey as well as SVEN). Some, however refer to the SVEN population only and are so marked.

2.1 Age

The oldest speaker was born in 1888, and the youngest in 1963—a span of 75 years.

2.2 Subgroup of teachers

Forty-seven teachers—elementary and secondary—made up almost 16% of the survey population.

2.3 Where informants were born

81% In Vancouver
84% In B.C. (including Vancouver)
94% In Canada (including B.C. and Vancouver)
99% In an English-speaking area
(The last figure includes 2% born in Britain and 1% in the U.S.)

2.4 Parents, grandparents, and spouses of informants (SVEN only)

15% Father from Vancouver
14% Mother from Vancouver
4% Both parents from Vancouver

Among those who were or had been married:
32% Spouses from Vancouver
59% Spouses moved to Vancouver before age 14
91% Spouses whose first language was English
75% Grandparents who had English as first language

2.5 Generation Canadian

24.5% First generation
26.5% Second generation
43% Third generation (at least)
6% Not actually born in Canada
2.6 Ethnic identification (SVEN only)

24% English
13% Scottish
7% Irish
9% British (general)
29% Canadian (including English and French Canadian)

2.7 Other ethnic associations during teenage years

66% None
5% French
6% Chinese
6% Japanese

2.8 Other languages spoken

78% English only
15% English and French
6% English, French, and Spanish

2.9 Mobility of family (SVEN only)

37% Same location--no change in status
29% Same location--changes upward
4% Same location--changes downward
6% Different location--no change in status
7% Different location--changes upward
3% Different location--changes downward

2.10 Education

9% Quit after Grade 8 or less
21% Quit after Grade 9-11
70% Completed Grade 12-13
46% University/College level (does not imply graduation)
15% Post-graduate/professional studies
40% Technical/vocational courses
2.11 Special use of English in job

69% Yes
31% No

2.12 Special interests: hobbies, volunteer jobs, etc. (SVEN only)

43% Language/word-oriented
57% Not language/word-oriented

2.13 Consider CBC announcers’ language an example of good Canadian English

35% No exposure to CBC
39% Yes
8% No
7% Mixed
6% Don't know

2.14 Gross annual family income (late 1970s)

9% Below $10,000
19% $10,000 - $15,000
19% $15,000 - $25,000
19% $25,000 - $35,000
22% Over $35,000

2.15 Summary

Thus the first section of the questionnaire gave us, as was intended, full confirmation of the correct stratification of our informants and, at the same time, provided us with much additional data in the area of informal speech. It also supplied a wealth of statistical information which, with the help of our computer program, we can utilize in order to study subsets of the informants in relation to some particular problem that calls for detailed investigation. The local place name KITSILANO, for example, was found to have a variety of pronunciations, and one of the same speaker often claimed to use two of these forms. To questions about this fluctuation these informants often replied that teachers had told them their pronunciation was wrong so they adopted the teachers "correct" version but did not manage to use it all the time. Following up the initial printouts which documented this variability we went on to extract from our population the subgroup of teachers, and checked their performance against that of the section of our population which had the highest level of education, namely group IV.
We found our informants’ explanation was confirmed in that both groups agreed on the "prestige" pronunciation, although, in terms of percentages, even group IV did not quite measure up to the teachers' performance. We were also able to carry out similar checks with some of the responses to the grammatical questions (Section IV). Similarly, in the case of local words (Section V), we were able to pinpoint some of the items geographically, finding that their distribution was limited to particular parts of the Greater Vancouver area.

There is in fact no limit to the ways in which the computerized information derived from this section could be used to carry out such follow-up investigations. Future researchers may, for example, wish to compare the preferred forms of first-, second-, and third-generation Canadians, a topic about which we already have some information, arising out of the Ottawa Survey carried out by Howard Woods in 1979. They will also find it possible to trace aberrant pronunciations to informants’ parents or even grandparents who came to Vancouver from other English-speaking regions—for example, the pronunciation of milk as (melk), which can be traced to some of the northern states of the U.S.

3. PRONUNCIATION

3.1 General information

Whether our informants pronounced butter as [ˈbʌtər] or [ˈbʌtər] (=budder); dentist as [ˈdentɪst] or [ˈdentɪst] (=dennist); new as [nuː] (=nyoo) or [nuː]; going as [ˈgʊɪnɡ] or [ˈɡʊɪnɡ]; schedule as [ˈʃedjuːl] (=sheddyool, ˈʃedʒuːl] (=shejool), [ˈskɛdjuːl], or [ˈskɛdʒuːl]; missile as [ˈmɪsɪl] or [ˈmɪsɪl] (=missuil); tomato as [təˈmeɪtoʊ(ʊ)] (=tomayto), [təˈmeɪtoʊ(ʊ)] (=tomato), [təˈmeɪtoʊ(ʊ)] (=tonahto), or [təˈmeɪtoʊ(ʊ)] (=tonayedo), etc.—this kind of variation in pronunciation in these and many other words was one of our major concerns in SVEN. For this reason five sections dealing with items known to show phonological variability were included in the questionnaire, namely sections II, III, VI, IX, and X.

Further, we were well aware that pronunciation varies not only from one individual to another, but even within the language of one and the same person, in a way which reflects different speech styles, ranging from highly formal to informal or casual. Consequently all of these sections were carefully designed to elicit specific stylistic as well as personal variables, and the design was reinforced by our fieldworker's instructions and comments. We also took care to include for each type of variation sufficient examples to satisfy statistically-oriented sociologists as well as linguists. We even made a point of introducing the same word into the different sections as frequently as was possible—words such as butter, twenty, new, wheelbarrow, going, futile, writer, house, garage, tomato, schedule, Vancouver, etc.—so that we could check precisely the
possibility of variant pronunciations from style to style, of identical words by the same speaker.

3.1.2 Systematic changes of sound or phonological variables

Variations in pronunciation fall broadly into three categories. First, there are those involving the systematic change of a given sound in a particular environment in words generally. These we have called "phonological variables." We investigated a total of 39 such variables.

In cases like this, it is possible to frame a phonological rule similar to an algebraic formula to account for the change involved, thus:

\[ \text{Medially, between vowels: } /t\ell/-/ld/ \]

Here \( /t\ell/ \) is the traditional or underlying value and \( /ld/ \) the new value arising from the application of the rule. For some speakers this rule applies across the board—in all styles of speech. For others it may operate only in the more casual speech styles. Such rules sometimes need modifications to cover special cases, as, for example, when the medial \( /t\ell/ \) is preceded by an \( /h/ \) rather than a vowel. In that case \( /t\ell/ \) may still become \( /ld/ \), as in seventy, \( [\text{sev\( \text{en}\)]} \) (=seventy); on the other hand, in twenty the \( /t\ell/ \) following \( /h/ \)—instead of changing to \( /ld/ \)—may be deleted altogether: \( [\text{tw\( \text{en}\)]} \) (=twenyy). In this case, the value of \( /t\ell/ \) is \( /h/ \), i.e., zero, and the rule would be expressed thus:

\[ \text{Following } n, /t\ell/-/l0/ \]

We included examples of many different types of words in order to check what happened to medial \( /t\ell/ \) in various situations where consonants rather than vowels formed part of the immediate environment.

3.1.3 Special profile words

As a second type of pronunciation variation, we have many words in which specific sounds vary freely and independently, creating a number of patterns—or "profiles" as we decided to call them. For example, \textit{garage} may be heard with a variety of stressed vowels in the second syllable, the vowel in \textit{cat, cart} or \textit{cot}. At the same time, the final consonant may be a \( /\text{ð}/ \) (as in \textit{jei}) or a \( /\text{ʒ}/ \) like the -\textit{go} in \textit{rouge}. So far, when we combine these possibilities, we have a total of six pronunciations, which can immediately be doubled when we observe that some speakers delete the weak vowel in the first syllable of the word. To these twelve possibilities, we can add a further four: some speakers include an extra \( /t\ell/ \) immediately before the -\textit{ge}, thus \( [\text{ge\text{'u}rd3}], [\text{ge\text{u}}\text{'a}r3], [\text{gr\text{u}rd3}], \) and \( [\text{gr\text{u}r3}] \). Finally, to bring the grand total up to eighteen versions,
we occasionally found the stress on the first syllable—British style: [ga'raɪdʒ] and [ga'raɪdʒ].

For items showing this type of free variation, our computer program has been able to help us arrange the possible profiles in the order of their frequency within our population as a whole, or any subsection of it, thus giving us a priority list with the "preferred" form in top position. In the case of garage, incidentally, the top position goes to [ga'raɪdʒ] (=ga-RAZH) with 30%, followed by [ga'raɪdʒ] (=ga-RAJ) in second place with 16%, and [ga'raɪdʒ] (=ga-RAZH) third, with 13%. There are four more profiles with over 5%.

3.1.4. Potential rhyme words

To study a third type of pronunciation variation, we introduced into the questionnaire many situations in which informants would have to produce what was potentially the same sound in two neighbouring words. It was an easy matter for our transcribers to note if these sounds in close sequence were identical or if they were not. In the latter case it often meant that the speaker was being inconsistent in that he or she was failing to apply a particular phonological rule used elsewhere. Following this thread through our questionnaire, we checked such things as speakers' pronunciation of the consonant cluster /nt/ in a phrase like "dental centre": the special Canadian diphthongal sounds of ou in "without a doubt"; the vowels in "cot" and "caught," etc. The statistical analysis of these "rhyme words" gave us some very important information.

3.1.5 Special note on the quantification of results

It cannot be too strongly stressed that, in evaluating the results of a sociolinguistic survey such as SVEN, in which all the responses have been coded and computerized, the most important aspect of the whole enterprise is the possibility of quantification, in other words, of showing the significance of the results in numerical terms. Our SPSS computer program provides us with the percentage of the whole SVEN population (or of any definable subgroup within it) who recorded a given response to any one of the 1058 principal questions or their many subdivisions. Thus the response of each and every group of informants to any question or set of questions can be compared with that of any other group of speakers in terms of percentages. It is this possibility that makes it feasible to consider the claim of linguistics—at least in this branch of its activities—to be a scientific discipline, a social science.

3.2 Systematic sound changes: A detailed analysis of a sample of the 39 phonological variables assessed in SVEN
3.2.1 Explanatory introduction

We questioned informants on a total of 39 examples of systematic changes in pronunciation known to be currently operative. Armchair linguists have theorized about some of these changes in rather abstract terms. One of our aims, however, was to frame questions that would test in an objective way these potential changes in both vowels and consonants in every relevant environment within words and across word boundaries. Our computerized data thus provide a rich empirical basis—hitherto missing—for accurate theorizing about the nature, scope, and limitations of such sound-shifts, viewed against a well-charted social background and a range of stylistic settings. Below is a list of the 39 items we studied.

Phonological Variables

1. (VIV) (city)
2. (tVn) (button, carton)
3. (ntV) (twenty)
4. (rtV) (dirty)
5. (tV) (shelter)
6. (aCvoC) (write)
7. (sCtV) (writer)
8. (nuCvoC) (house)
9. (nutV) (shouted)
10. -(ing) [verbal] (working)
11. -(ing) [nominal] (morning)
12. -(ing) [pronominal] (anything)
13. -(ing) [other] (during)
14. (ju) preceded by n,t,d (news, student, dew)
15. (hw) (why)
16. (ær) (carrots)
17. (o/a) (cot/caught)
18. (a/æ) (book)
19. (ir) (mirror)
20. (æg) (egg)
21. (atl) (missile)
22. (Væl) (school)
   (Vær (our)
   (Væn)
23. (orV) (orange)
24. (æe) (that, Canada)
25. (ælm) (calm)
26. (#and#) (pen and pencil)
27. (ktf) (picture)
28. (ns) (once)
All changes in pronunciation must make sense phonologically, so our first subject of investigation, medial /t/, was placed in a series of controlled phonetic environments—flanked by vowels, or by consonants selected for their special phonological properties. The diffusion of these changes, however, may be influenced by social and also situational factors. Hence our analysis of phonetic environments had to be related to the three major sociological factors, as well as to the specific situational stimuli which trigger the formal-to-casual range of speech styles.

3.2.2 A sample interpretation of tabulations for Variable #1 (VtV)

Variable #1 examines /t/ when it occurs between two vowels (VtV). The phonological rule operative here states that medial, intervocalic /t/ adds the feature "voice" t → d / V_V (becomes /d/) with many speakers in many situations:

Pages 18-32 show the tabulations for words such as butter, tomato, water, united, British, notice, catalogue, city, hospital, meeting, etc., where medial /t/ occurs between vowels. The first tables display figures for Variables #1, Value #2, namely /d/. In other words, these tables show for what percentage of the relevant items the survey speakers in the SVEN population, as a whole, and in each subgroup, pronounced this intervocalic medial /t/ as /d/. Tabulations are broken down according to type of speech task. Thus, the subheading for these first tables shows that we are dealing here with the 13 words included in the minimal contrast section of the questionnaire, i.e., section X, which presented together pairs of words that for some speakers might rhyme or sound alike (e.g., latter/ladder). Also included in this section were words that might be contrastive in some special way (e.g., the vowel in the singular form knife as compared with that in knives). Because of this conspicuous juxtapositioning of words in pairs, we expected the responses to this section to evoke the most formal speech style of all.

The figure below the title for the first set of tables—Overall mean: 30—shows that for the relevant set of words SVEN informants as a group pronounced medial /t/ as /d/ 30% of the time.
The percentages in the first three tables show very clearly in every case a step-by-step increase: the shift from /h/ to /d/ increases from 17% for the older speakers (O), to 25% for the middle group (M), and 48% for the young (Y). Under sex, we see the 22% for the females increasing to 38% for the males. The socio-economic groups show a similar stratified increase from the top group (IV) with 18% to group III with 29%, group II with 34% and group I with 39%. Looking at each factor separately this change seems thus to be favoured by the young rather than the old, the males rather than the females, and the lowest socio-economic class rather than the upper.

It should be noted here that the percentages in these tables refer not to informants as individuals but to their performance, i.e., whether they pronounce /h/ or /d/ in a given group of words. Here we are dealing with VALUE #2 /d/ and the numbers shown are the percentages of [d] realizations of /h/ by the group indicated and for the type of speech task indicated.

Pronunciation: Tabulations for Variable #1: VtV

VtV Value # 2 /d/ Minimal-contrast style: 13 items
Overall mean: 30

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VIV Value # 3 It is Minimal contrast style: 13 items
Overall mean: 68

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**VIV Value #2** / Word-list style: 23 items
Overall mean: 49

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**VIV Value # 2 /d/ Series style: 2 items**

*Overall mean: 54*

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Overall mean: 54

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VTV Value # 2 / Visual-aural style: 18 items
Overall mean: 6

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VtV Value # 3 It↑ Visual-aural style: 18 items
Overall mean: 37

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VIV Value # 1 & Reading Passage: 49 items
Overall mean: 16

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Vtv Value #2 /dl Reading Passage: 49 items
Overall mean: 78

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### SEX

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The third to sixth tables (pages 18-19) show how the three sociological factors (age, sex and socio-economic status) correlate, two at a time. The most striking contrast to observe in the age/sex table is a comparison of the bottom right-hand cell (the older females: 9%)—diagonally—with the top left (the young males: 52%), showing an almost six-fold increase for the latter group.

In the cross-tabulation of socio-economic status with age, the contrast, again diagonally, between the same two cells—older females of class IV (5%) versus young males of class I (64%)—is even more striking. The same polarization is evident, though to a lesser degree, when socio-economic status is cross-tabulated with sex, namely 16% for the older class IV females as against 50% for the young class I males.

The cross-tabulation of all three sociological factors taken together reveals the most extreme polarization of all, the score for the young class I males (77%) being almost 20 times greater than the older class IV females (4%).

The unmistakable conclusion from all these figures is that medial voicing, i.e., the shift from /t/ to /d/ in this speech style, is predominantly a feature of male rather than female speech, of young rather than older speakers, and of class I rather than class IV. The three factor cross-tabulation makes it quite clear that the young males in the lowest status group are in the vanguard of this shift while the oldest females in the top status group resist the change.

One further matter of interest is that within almost every table the percentages are stratified, i.e., they show in the majority of cases a step-by-step increase from old to young, female to male, class IV to class I, as the case may be.

When change is taking place in the language, by studying the tabulations, we are able to determine which subgroup is scoring the highest percentage for the change: whether it is a certain age group, or sex group, or socio-economic category, and especially we can note if it is some specific intersection of these groups. There are also other questions that can be considered: Which group tends to be most conservative with regard to the traditional linguistic forms? Which form is preferred by the overall majority? Which form is favored by the prestige group who have the highest level of education?

So far we have discussed the effect of the phonetic environment (e.g., VIV) and the type of speaker on a phonological variable. A third factor isolated by these tables is speech task or speech style. Ranging from the most formal to the most informal, the speech styles elicited in the SVEN questionnaire are listed below:

**Formal**
- Minimal-Contrast (MC)
- Word-List (WL)
- Series (S)
- Visual-Aural (VA)

**Informal**
- Reading Passage (RP)
By comparing the percentages from style to style, we can thus observe immediately the influence of the formal or casual speech situations on speakers in all of the groups, up to and including the final 24 subgroups.

To begin our analysis let us first compare the MC overall mean of 30%, for VtV Value #2 /l/d/, with the corresponding general averages for the other four speech styles. The following table shows speech style (and questionnaire section) with overall mean.

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<tr>
<td>Reading passage (section VI)</td>
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This case--Variable # 1, Value # 2--is quite clear cut (other cases may prove less so): there is an unmistakable, step-by-step increase in the occurrence of /l/d/ in place of medial /l/ as we move down the range of speech styles from the most formal (MC) to the most casual (RP). In fact the shift from /l/ to /l/d/ is over two-and-a-half times more frequent in the most casual style (RP) than it is in the most formal (MC).

When we framed the questionnaire, one of our hypotheses was that the informants would be influenced by these controlled changes of speech style. Our results show that this assumption was fully justified.

Alternating with the tables analysing /l/d/ use in various speech styles are tables presenting VtV Value # 3, which is [fl], i.e., /l/ pronounced with a slight puff of breath (technically called aspiration) before the onset of the following vowel. This articulation--normal in initial position when followed by a stressed vowel--is not traditionally used in medial position where an unaspirated /l/ would be expected. The use of [fl] here suggests hypercorrection, i.e., that the speaker is being over-careful--especially in this formal speech style--to avoid the 'popular' shift to /l/d/.

In the MC style, Values # 2 and # 3 split the field. Therefore, the figures in these two sets of tables virtually mirror each other. The highest percentages for VtV Value # 3 /l/ are registered for the older speakers and especially for the older, upper-status women, while the young, low-status males have by far the lowest percentage.

The Reading Passage proved to be the least formal of all the five speech styles elicited by the sections of SVEN that dealt with pronunciation. Before our survey results made this clear, however, there was a wide-spread belief among many sociolinguists that reading tasks elicited a formal style.
The first block of tables on page 30 shows that in the Reading Passage the overall mean was 16% for Value # 1, the traditionally expected value: un aspirated /t/. In other words, there was no hypercorrection in this style. This percentage was completely overshadowed, however, by the overall mean of 76% for Value # 2 /l/ (page 31). In comparison with the minimal contrast style, note that the results here were less markedly polarized. The older, upper-status women still showed the lowest scores (54%) and the young, low-status males had one of the highest (87%). However, more than half of the upper-status women changed /t/ to /l/ in this relaxed style.

Between the extremes of the Reading Passage (RP) and the Minimal Contrast (MC) style let us look at some of the salient statistics for the intervening speech styles. We have already seen that the overall average percentages show a regular increase in the pronunciation of /l/ for medial /t/ in each style as we move towards the most casual style (RP).

Including RP, in every case the tables for age and sex show the same step-by-step increase as MC for the shift from medial /t/ to /l/. The SES table shows the same gradation for the WL and VA styles but for S and RP, minor cross-overs occur, i.e., the percentage for the class II young speakers is a few points higher than for class I. This has a slight effect, of course, on some of the cross-tabulations involving the socio-economic factor.

In any case, the same diagonal polarization is still strikingly apparent in the three-factor cross-tabulation (SES, age, sex) for all the other styles as it was for MC, thus:

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</tbody>
</table>

From the point of view of the increasing use of /l/ in place of medial /t/, the percentages recorded for the young class I males show a couple of minor fluctuations, but for the older class IV females there is a graded increase across all the styles apart from S (Series). This latter deviance may be a reflection of the fact that S had a weaker statistical base (only 2 items) than the other styles. MC, by way of contrast, had 13 items, WL had 23, VA had 18, and RP had 49. In any case, if we ignore the S percentage, there is a perfect gradation from 4 to 12 to 33 to 54.

The extraordinary feature about these last figures is, of course the striking increase in the percentage of older class IV females who shift /t/ to /l/ in the VA and particularly the
RP style where they end up with a score of 54% when speaking in this latter casual manner.

3.2.3 Other phonological variables involving medial /t/; Variables # 2-5

The foregoing was a detailed explication of the first of our phonological variables. With regard to the others, the comments that now follow will be limited to special features that emerged from our statistical analysis.

• Variable # 3 (ntV)

This variable included items such as twenty, dentist, etc., in which /t/ is preceded by /n/ and followed by a vowel. As compared with the Variable # 1 pattern--(VIV)--this time in Variable # 3 with a preceding /nt/, the /t/ shifted to /d/ in a smaller number of cases. Below are the overall mean responses for /nt/ in the various speech styles:

|         | MC: 6% | WL: 9% | S: 10% | VA: 12% | RP: 22% |

Once again, however, note the regularly increasing percentage of the /nt/-/d/ shift as we move through speech styles towards the casual style at the extreme right.

The traditional underlying /t/ or [tʰ] remains unchanged, but decreases from MC style with 91% to RP with 48%--more or less a mirror image of the first row of statistics. The really interesting value for this variable, however, is Value # 5, covered by the following rule:

\[ t \rightarrow 0 \text{ /n}_\text{V}\]

This shift of /t/ to zero does not happen at all in MC, the most formal style, but it increases from 9% for WL to 25% for RP, so it is, predominantly, another characteristic of casual speech (like \( t \rightarrow d \text{/V}_\text{V} \)).

• Variable # 4 (ntV)

Unlike Variable # 3, the (ntV) pattern behaves much more like Variable # 1--(VIV)--presumably because /t/ is more vowel-like than /nt/. The shift by which /nt/-/d/ applies to all styles, and the percentages range from 16 for MC to 86 for RP, a gap of 50%, where the gap for Variable # 1 was 46% (from 30% for MC to 76% for RP).

• Variable # 5 (ltV)

With this pattern--/lt/ preceded by /l/ and followed by a vowel--the frequency of the shift by which /lt/-/l/ is the lowest for the whole group of variables covered so far, the range being from 0% for MC through 8% for both WL and VA to 12% for RP. These findings
throw some light on the theoretical controversy about the phonological features that should be assigned to /h/ and /l/. The different behaviour of /h/ preceded by /t/ and by /l/ suggests that, although /l/ has some vowel qualities it is on the whole less vowel-like than /h/. It is generally agreed that, in common with all the vowels, /h/ has the feature "continuant" but for the lateral /l/ this continuant feature is questionable (Chomsky and Halle 1968: 318; see also Wells 1971).

Variable #2: Medial /h/ followed by /n/

To complete our study of medial /h/ we must return to Variables #2a through 2d, all of which involve an /h/ following the /n/ (as in button, carton). As before, the underlying or traditional /h/ or [h] crops up, but mainly in the more formal styles and only when the vowel following /h/ is articulated. Very frequently this vowel is dropped which means that the /h/ must become syllabic.

With syllabic /hn/, a new value—which is the dominant one—arises for the /n/; it is glottalized or, more frequently, is simply replaced by a glottal stop. Glottalization is represented by an apostrophe: [h']. The glottal stop, however, has a special symbol: [ʔ]. The glottal stop is generally articulated by bringing the vocal cords tightly together and, with outgoing breath, exploding them apart without any further obstruction in the mouth cavity. If this is combined with a normal explosive /h/ the resulting output is glottalized, i.e., [h']. One further complication for the variables under study here is that both [h'] and [ʔ] must be exploded nasally because the mouth cavity is completely blocked during the articulation of syllabic /hn/. These nasalized versions of a glottalized /h/ and a glottal stop could be represented in a narrow transcription as follows: [h'] and [ʔ].

The responses of the whole SVEN population for these variables in the different styles are shown in the following tabulations:

<table>
<thead>
<tr>
<th>Speech style</th>
<th>Value #3 [h'] or [h]</th>
<th>Value #4 [h'] or [ʔ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC</td>
<td>17%</td>
<td>79%</td>
</tr>
<tr>
<td>WL</td>
<td>12%</td>
<td>86%</td>
</tr>
<tr>
<td>VA</td>
<td>6%</td>
<td>92%</td>
</tr>
<tr>
<td>RP</td>
<td>9%</td>
<td>90%</td>
</tr>
</tbody>
</table>

As usual, the traditional value (#3) decreases as the level of formality decreases—from MC to RP—and the new value (#4) increases up to 90%.

Looking at the 24-cell cross-tabulation of SES, age, and sex we find the following figures for the same variable:
These percentages show that the young Class I males have gone over almost completely to the glottal values for medial /l/ here, and even the older Class IV females have a high score for the same Value # 4, rising to 90% in VA and RP. Glottalization in this context is clearly a very general phenomenon in all speech-styles and among all speakers.

On the whole these figures cover a very similar range to those for Variable # 2a. This is not surprising when we recall that /l/--although generally classified as a consonant--has features that are vowel-like.

As for Variable # 2a the values for medial /l/ following /l/ are very high. For both YM I and OF IV the highest percentage is reached in the Reading Passage.
<table>
<thead>
<tr>
<th>Variable # 2c (nt(V)n) (mountain)</th>
<th>Speech style</th>
<th>Value # 3 [t'] or [l']</th>
<th>Value # 4 [l'] or [ʔ]</th>
<th>Value # 7 [-ʔ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC</td>
<td>62</td>
<td>30</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>WL</td>
<td>63</td>
<td>29</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>VA</td>
<td>66</td>
<td>26</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>RP</td>
<td>52</td>
<td>12</td>
<td></td>
<td>24</td>
</tr>
</tbody>
</table>

For this variable there is an additional complication: when the final vowel (V) is dropped—which is frequently the case—the medial /l/ is flanked by the nasals /n/, before, and syllabic /n/, after. When this happens the glottalized /l/, i.e., [t’], or more usually the simple glottal stop [ʔ], must be exploded nasally, of course. In addition, however, the first /n/ is often itself deleted leaving a trace in the form of its nasal feature which nasalizes the preceding vowel, thus giving rise to Value 7 [-ʔ] where the symbol [-] marks nasalization. The breakdown by socio-economic status, age and sex gives the following percentages:

<table>
<thead>
<tr>
<th>SES/AGE/SEX (nt(V)n) Value # 4 [l’] or [ʔ]</th>
<th>Speech style</th>
<th>YM-I</th>
<th>OF-JV</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC</td>
<td>90</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>WL</td>
<td>43</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>VA</td>
<td>50</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>RP</td>
<td>13</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SES/AGE/SEX (nt(V)n) Value # 7 [-ʔ]</th>
<th>Speech style</th>
<th>YM-I</th>
<th>OF-JV</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC</td>
<td>10</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>WL</td>
<td>7</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>VA</td>
<td>0</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>RP</td>
<td>27</td>
<td>19</td>
<td></td>
</tr>
</tbody>
</table>

Although these glottal values represent mostly less than 50%, the figures are still important, reaching a maximum in the MC style for Value # 4, and in RP—the most casual—for Value # 7.
### Variable # 2d (hN[vN]) (salt and...)

<table>
<thead>
<tr>
<th>Speech style</th>
<th>Value # 3 [l'] or /l/</th>
<th>Value 4 [t'] or [?]</th>
</tr>
</thead>
<tbody>
<tr>
<td>VA</td>
<td>18</td>
<td>78</td>
</tr>
</tbody>
</table>

This variable was covered only for VA style. The figures still show the glottal values to be far ahead, and in the cross-tabulation of SES, age, and SEX the young Class I males reach 100% for glottalization as against the older Class IV females with 50%.

To sum up the results for Variables # 1-5, we can express the possibilities in terms of a set of rules which have varied application:

- **Medial /l/** → /d/ after V or ln/ and before V
- **Medial /l/** → /O/ especially after ln/ and before V
- **Medial /l/** → [4'] between ln/ and syllabic ln/
- **Medial /l/** → [?] between ln/ and syllabic ln/

#### 3.2.4 Variables # 6-9: Canadian diphthongs

Two sets of diphthongs were of particular interest to us in SVEN:

1. those that occur in by and bite
2. those that occur in bow (rhymes with cow) and bout

First, to define the term, a diphthong is a rapid combination of two vowels: the first—stressed—element (called the onset) and the second shorter, weaker element (called the glide).

To represent diphthongs accurately and unambiguously we must use a few phonetic symbols. In the words quoted above, for example by is pronounced as [baI] where the onset [a] is sounded like the a in bar and the glide is a short, weak sound like the /i/ in it. Thus, a diphthong actually combines two vowels—although the normal spelling uses one letter: y. In the word bite [baIt], in contrast to by, the onset is a “neutral” vowel like the first or last a in banana (phonetically represented by [a] and called schwa, a name borrowed from Hebrew).

In the word bow [baʊ] the onset is, as in by, like the a in bar but the glide this time is like a very short version of the ɔ in foot. In bout [baʊt], in contrast to bow, the onset is like the vowel u in but. The diphthongs [ai] and [au] as in bite [bai] and bout [bau] are special Canadian forms: clear markers of Canadian English speech as distinct from American and known to many observers (including customs officers). American, British and other speakers have identical diphthongs in both words by [bai] and bite [bai] as well as in bow [baʊ] and bout [bau]. The special Canadian forms [ai] and
[ʌt] occur not only before [t] but before all other similar consonants, namely the voiceless ones—those pronounced without voice, i.e., without vibration of the vocal cords. The [at] and [a tài] occur in final position, or before vowels, or before the voiced consonants such as [d] pronounced, unlike [t], with accompanying vibration of the vocal cords.

We set out to investigate the prevalence of these characteristic Canadian diphthong forms in general, and also in a rather tricky situation, namely before a medial /l/ which, as we have seen under Variables # 1-5, may in certain circumstances become /l/ /l/, i.e., may change from a voiceless to a voiced articulation. The question which has aroused considerable controversy is whether or not the expected Canadian form [ɔl] which occurs before [t] would change to [at] when the [t] becomes [d]. Our Variables # 6-9 were designed to settle on a scientific basis this controversial question. We were, of course, also concerned to check on the survival of these characteristic Canadian sounds in general—from the oldest to the youngest generation, among males and female speakers, and in the different socio-economic status groups. Our statistics paint a clear picture: in almost every case—age, sex, socio-economic groups through the full range of speech-styles—the percentages are in the nineties, sometimes 100%, only occasionally as low as the eighties, as the following tables show:

Variable # 6 (GilC voice) (write)
Overall mean: 94%

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Y-I</th>
<th>O-IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC</td>
<td>96</td>
<td>95/98</td>
<td>98/98</td>
</tr>
<tr>
<td>WL</td>
<td>96</td>
<td>94/96</td>
<td>100/94</td>
</tr>
<tr>
<td>VA</td>
<td>95</td>
<td>87/93</td>
<td>92/85</td>
</tr>
<tr>
<td>RP</td>
<td>97</td>
<td>100/100</td>
<td>99/99</td>
</tr>
</tbody>
</table>

Variable # 7 (oitV) (writer)
Overall mean: 90%

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Y-I</th>
<th>O-IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC</td>
<td>94</td>
<td>87/97</td>
<td>97/93</td>
</tr>
<tr>
<td>WL</td>
<td>90</td>
<td>95/100</td>
<td>95/85</td>
</tr>
<tr>
<td>VA</td>
<td>90</td>
<td>80/93</td>
<td>93/93</td>
</tr>
<tr>
<td>RP</td>
<td>84</td>
<td>86/84</td>
<td>86/84</td>
</tr>
</tbody>
</table>
Variable #8 AuC\textsuperscript{-voice} (house)
Overall mean 93%

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Y-I</th>
<th>O-IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC</td>
<td>94</td>
<td>93/90</td>
<td>97/100</td>
</tr>
<tr>
<td>WL</td>
<td>93</td>
<td>98/88</td>
<td>100/100</td>
</tr>
<tr>
<td>VA</td>
<td>90</td>
<td>68/86</td>
<td>100/100</td>
</tr>
<tr>
<td>RP</td>
<td>96</td>
<td>98/98</td>
<td>99/98</td>
</tr>
</tbody>
</table>

Variable #9 AuTV (shouted)
Overall mean: 94%

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Y-I</th>
<th>O-IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC</td>
<td>92</td>
<td>73/80</td>
<td>100/100</td>
</tr>
<tr>
<td>WL</td>
<td>96</td>
<td>93/97</td>
<td>100/100</td>
</tr>
<tr>
<td>VA</td>
<td>91</td>
<td>77/90</td>
<td>97/100</td>
</tr>
<tr>
<td>RP</td>
<td>96</td>
<td>100/90</td>
<td>100/95</td>
</tr>
</tbody>
</table>

The symbol C stands for consonant, and [C\textsuperscript{-voice}] stands for any voiceless consonant. Y-I stands for all the young speakers of Class I (male and female scores separated by a slash). Likewise O-IV refers to all the older class IV speakers—male and female. The overall mean for each variable is given below each heading. In general, it should be noted that the [l] in Variable #7 and #9 is a medial [l] between vowels which, as we found from Variables #1-5, is shifted to [l] by many speakers.

It is clear here that this shift has had little or no influence on the choice of diphthong; the [æı] in Variable #7 still scores 90% in spite of the predictable shift, and in the case of [Au] in #9 the score of 94% is actually up one point. These figures effectually dispose of what the late Professor Martin Joos called the "Canadian dilemma" (1942), by which he implied that Canadians were divided, one group changing their [æı] diphthong to [æı] and the other [Au] to [æı] when they shifted [l] to [l], in contrast with another group who made no changes.

The question as to the survival of this particular Canadian feature of pronunciation is also unmistakably answered by our statistics. Not only are most of the figures up in the 90-100% range in general, but—in addition to the extremes of Y-I and O-IV—this is true for all the subgroupings by age, sex, and SES as well as for all the speech styles. These diphthongs thus remain here as a special characteristic of Canadian speakers of
all categories and in all circumstances, at least insofar as Vancouver is concerned, and our evidence goes to show that the speech of this area is in every way typical of what is called General Canadian English.

So far we have dealt with two major phonological issues:

1. the transformation of medial /l/, which is relevant to all varieties of North American English.

2. the distribution of the alternate forms of two diphthongs, which is, in the present context, a Canadian matter.

3.2.5 Variables # 10-13: The ending (ing)

Variables # 10-13 cover our research into the phonetic values given to the ending /-ing/. This, is an area of concern to the whole English-speaking world. We added some new dimensions to the investigation by eliciting responses to items in the questionnaire which represent the different grammatical functions of /-ing/-verbal, nominal, pronominal and other. As a result of my own earlier observations as well as the experience of our pilot survey and the Ottawa Survey, we were also able to isolate some new phonetic values not identified in previous research, e.g., /-in/.

• Variable # 10 (ing) (Verbal) (Working)

The mean percentages for six different values of Variable # 10 in all four speech styles are summarized in the following below. The overall mean for the value /-ing/ is 72%.

<table>
<thead>
<tr>
<th></th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC</td>
<td>73</td>
<td>12</td>
<td>7</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>WIL</td>
<td>69</td>
<td>19</td>
<td>8</td>
<td>(0.2)</td>
<td>0</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>VA</td>
<td>67</td>
<td>9</td>
<td>11</td>
<td>2</td>
<td>7</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>RP</td>
<td>78</td>
<td>4</td>
<td>9</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

These figures do not show the clearly stratified increase or decrease we saw for some of the earlier variables. The range between highest and lowest for each value is limited.

It is noteworthy that the pronunciation /-ing/-in line with the spelling—ranks far ahead of all the others, which, with the exception of Value # 7, end with /in/. This use of /in/ is
often popularly but inaccurately referred to as "dropping the g." Actually the spelling ng at the end of a word always represents a single nasal consonant produced by a closure between the back of the tongue and the soft palate or velum, whence the ng sound is called technically a velar nasal, which has, in the International Phonetic Alphabet, a special symbol [ŋ]. There is in any case no g to drop. What happens is that, in this -ing ending, a normal [ŋ] is sometimes used instead of velar [ŋ]. Historians of the English language make it clear that the pronunciation with [ŋ] is in fact traditionally correct for these verbal forms (being derived from Old English forms with -in(d)-, etc.) and was so considered by "the best speakers" (Wyld 1949: 209) until the beginning of the nineteenth century when "governesses and schoolmasters successfully weged war and the result has been a widespread adoption of [ŋ] to agree with the spelling" (209). The efforts of generations of dedicated teachers over the last two centuries have obviously consolidated this early victory, for the "spelling pronunciation"--[ŋ] for -ing--is now in top position for every style, even the most casual (RP).

Among the forms with [ŋ], -in/ is favored rather than -in/ in the more formal styles and both are well ahead of the -on/ form with the weak "neutral" vowel or schwa, generally felt to be a stigmatized pronunciation nowadays. The -in/ pronunciation, which was of quite marginal occurrence and had not been previously observed, is important as a possible transitional stage between -in/ and -in/.

Other more detailed statistics show that in MC style -in/ is used more by the older speakers and the top status groups and less by the young and the lower status groups. The percentages for males and females are about the same.

Among the age groups, the highest score for -in/ goes to the young with 15%; between the sexes, the females with 13%; among the status groups, to I and II with 12% and 14% respectively. It should be noted, however that the second highest cell score goes to the OF-IV with 24%.

Once again -in/ is most used by the young (11%) and the lower status group (8% and 7%), but this time the males have the lead with 9%. The remaining values show low scores and little differentiation.

For WL style the percentages follow exactly the same pattern as for MC, and for VA style also, except that, in the case of -in/, the middle age-group is top (11%) and the sex groups are equal.

The RP style shows some differences: the middle and old age groups each with 79% are ahead with -in/; the females lead with 80%, and the top status groups lead with 81% and 77%. For the other five values the percentages show no important differentiation.

Variable #10 dealt with verbal words, such as lying, working, shouting, being and putting. Parallel to the results for Variable #10 are the following tabulations for Variables #11, #12, and #13.
• Variable #11 dealt with noun-class words such as ceiling, awning, morning, pudding, evening

<table>
<thead>
<tr>
<th>Variable #11 (ing) [nominal]</th>
<th>Overall mean for /-in/: 76%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.</td>
</tr>
<tr>
<td></td>
<td>/-in/</td>
</tr>
<tr>
<td>MC</td>
<td>80</td>
</tr>
<tr>
<td>WL</td>
<td>72</td>
</tr>
<tr>
<td>VA</td>
<td>79</td>
</tr>
<tr>
<td>RP</td>
<td>72</td>
</tr>
</tbody>
</table>

• Words covered by Variable #12 include something, anything, nothing.

<table>
<thead>
<tr>
<th>Variable #12 (ing) [Pronominal]</th>
<th>Overall mean for /-in/: 88%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.</td>
</tr>
<tr>
<td></td>
<td>/-in/</td>
</tr>
<tr>
<td>WL</td>
<td>87</td>
</tr>
<tr>
<td>VA</td>
<td>86</td>
</tr>
<tr>
<td>RP</td>
<td>90</td>
</tr>
</tbody>
</table>

• Heterogeneous words such as during, interesting, and Washington were included under Variable #13.

<table>
<thead>
<tr>
<th>Variable #13 (ing) [other]</th>
<th>Overall mean for /-in/: 65%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.</td>
</tr>
<tr>
<td></td>
<td>/-in/</td>
</tr>
<tr>
<td>MC</td>
<td>62</td>
</tr>
<tr>
<td>WL</td>
<td>57</td>
</tr>
<tr>
<td>RP</td>
<td>67</td>
</tr>
</tbody>
</table>

Our hypothesis that the ending /-in/ would behave differently for the different word classes is clearly borne out as the following summary table shows:
## Overall Means for All Speech Styles

<table>
<thead>
<tr>
<th>Variable #10 [Verbal]</th>
<th>/-ɪŋ/</th>
<th>/-ɪn/</th>
<th>/-ɪn/</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>72</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>Variable #11 [Nominal]</td>
<td>76</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Variable #12 [Pronominal]</td>
<td>88</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Variable #13 [Other]</td>
<td>85</td>
<td>8</td>
<td>12</td>
</tr>
</tbody>
</table>

Although words of the verb class (Variable # 10) and the noun class (Variable #11) have similar percentages, the pronoun forms have a much higher percentage for /-ɪŋ/, perhaps because these pronouns are compounds involving the noun *thing* and thus differ from the other three variables which have a terminal formative element, the morpheme *-ing*. The "other" category, which is a very small group, includes one preposition, *during*, adjectives such as *boring*, *interesting*, and place names such as *Washington* and *Bellingham*. This category has the lowest percentage of all for /-ɪŋ/.

For /-ɪŋ/ (verbal), detailed statistics show the following preferences across all speech styles (the arrow points in the direction of the higher score):  

<table>
<thead>
<tr>
<th>/-ɪŋ/</th>
<th>/-ɪn/</th>
<th>/-ɪn/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y→O</td>
<td>O→Y</td>
<td>O→Y</td>
</tr>
<tr>
<td>F→M</td>
<td>M→F</td>
<td>F→M</td>
</tr>
<tr>
<td>l→IV</td>
<td>IV→l</td>
<td>IV→l</td>
</tr>
</tbody>
</table>

Looking for the highest scoring cells in the SES, age, sex cross-tabulation, we found that the oldest speakers, the males, and SES IV use /-ɪŋ/ most. The young, the females and class I score highest for /-ɪn/; and the /-ɪn/ pronunciation is most used by the young, the males, and class I. The highest scores of all are registered for the old males of class IV for /-ɪŋ/, yet the old females of class IV score second highest to the young men of class II for /-ɪn/, while /-ɪn/ shows the highest scores for the young men of classes I, II, and III.

### 3.2.6 Variable # 14: /ɪn/, /n/, /d/ + [ju]

Words with two pronunciations like *new* /ɪn ju/ or /ɪnul, tune* /tʃu n/ or /tʃun/ and *dew* /dju/ or /dul/ were targeted by this variable. These alternate values can be compared by polarizing the forms without the *ɪj* element (*ɪj* is pronounced like the *y* in *yes*) against the others in which the *ɪj* is present in some form or other. The *ɪj* form is, of course, the traditional pronunciation, so we are dealing here with a linguistic change involving the loss of *ɪj*. This change may be summarized by a rule:
After /n/, /l/ or /ld/, /ju/ → /u/

This change is more prevalent in the United States than in Canada and American dictionaries either show the pronunciation without the /ju/ in first place and the form with /ju/ second, or they simply omit the form with /ju/ altogether. Canadian dictionaries show the reverse order: the form with /ju/ is first and the form without /ju/ second. British dictionaries show only the pronunciation with /ju/.

This (loss of /ju/) plays no role in standard British English where it would be stigmatized, although it does crop up regionally in the English Midlands. Its prevalence in Canadian English may be assessed accurately from the following percentage figures which refer to the whole SVEN population:

<table>
<thead>
<tr>
<th>Style</th>
<th>/ju/</th>
<th>/u/</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC</td>
<td>54</td>
<td>46</td>
</tr>
<tr>
<td>WL</td>
<td>53</td>
<td>42</td>
</tr>
<tr>
<td>S</td>
<td>68</td>
<td>32</td>
</tr>
<tr>
<td>VA</td>
<td>57</td>
<td>43</td>
</tr>
<tr>
<td>RP</td>
<td>54</td>
<td>46</td>
</tr>
</tbody>
</table>

The overall means for the whole SVEN population were 58% for /ju/ and 42% for /u/.

These figures all show that, although this change or shift has made considerable headway, the traditional pronunciation with /ju/ still scores—within the range of the styles indicated—from 54 to 68 percent.

The more detailed statistics show a stratification very similar to that for medial /u/ in

Variables # 1-5: for the new or shifted value /lu/, the young speakers, the males, and the lowest status group have the highest percentages while the old, the females and the top status group have the lowest scores.

Just as for the medial /u/ variables, again, the most striking polarization is seen in the cross-tabulations, especially the three-factor 24-cell table of status correlated with both age and sex, which presents the following figures:
Once again the young male speakers of the lowest status group are in the vanguard of this change, and the conservative elements are the older females of the top status group.

The statistics for the retention of the /j/ element would of course be the mirror image of those given above for /u/:

3.2.7 Variable # 15: (hw)

This variable covers the pronunciation of words with initial orthographic wh-, such as when, wheel, whether, which, while. A simple dichotomy is involved here: speakers either pronounce the words quoted above in exactly the same way as wen, weal, weather, witch, wile, making no distinction between the wh- and the w-, or they do make such a distinction. In the latter case the difference hinges on the presence or absence of voice (i.e., vibration of the vocal cords), wh- being articulated as a voiceless sound while w- is its voiced counterpart. Linguists, incidentally, prefer to transcribe the voiceless version phonemically as /hw/, which was the spelling used for Old English. This /hw/ value, is, of course, the traditional pronunciation, phonetically [M].

Dedicated teachers have fought a losing battle over the last three generations to preserve the distinction between the wh- words and the w- words. Their defeat is shown by the global percentages for every style and for all SVEN informants:
The overall mean for all styles and all speakers is 23% for /hw/, the traditional value, and 77% for /wl/.

The monumental Webster's Third New International Dictionary has the following comment in the introduction: "With most American speakers whet and wet differ in pronunciation but with most southern British they do not" (Artin 1976:10a). Thus, Canadian speakers seem to be following the British pattern, although it should be borne in mind that the northern British—specially the Scots—as well as the Irish tend to preserve the traditional /hw/ sound. Scottish and Irish immigrants have perhaps helped to slow down its complete loss in Canada.

A closer look at the detailed statistical tables for /hw/ in MC style shows sharp generation gaps from old (53%), to middle (23%), to young with only (9%). The sex groups are almost equal but the status groups are stratified as in the case of age, ranging from class IV (35%), down to class II (22%) and class I (23%). More than 9 out of 10 young speakers have lost this wh- versus w- distinction, and more than three quarters of the two lower status groups likewise.

As with earlier variables such as medial /l/, the 24-cell SES/AGE/SEX tabulation polarized these contrasts even more strikingly, the highest percentages for retention of /hw/ being the old class III and IV females (72% and 62%) while the lowest scores were the young class I and II males and the young class II females (all 4%). A very similar stratification of percentages and the same polarization of the old in class IV and the young in class I is evidenced in all the other speech styles—WL, VA, and RP.

An interesting extension of our investigation of the last two variables (#14 and #15) was summarized in a paper read by one of my former research assistants, Gaelan Dodds de Wolf, at the Learned Societies meetings in Vancouver in 1983. She had made a comparative study of the Vancouver data on /ju/ and /hw/ and the corresponding data from Howard Woods' Ottawa Survey (see de Wolf 1985).

Her findings show conclusively that in Ottawa as in Vancouver it is the older, upper-status women who best preserve the traditional values, i.e., /ju/ and /hw/. Further, for both variables and in both cities, the maximum differentiation is found in the most formal style. The overall comparison of the two variables between Ottawa and
Vancouver reveals a marked congruency (with only 0.5% difference) in choice of the traditional /ju/ in both sexes. For /hw/ there is no inter-city difference for women, but a 7% difference for men. Considering the distance of over 4800 kilometres which separates the two cities, this agreement is remarkable and certainly could not be paralleled on the American side of the border or probably anywhere else in the English-speaking world.

We are hoping to be able to establish further areas of congruence—grammatical and lexical as well as phonological—with convincing facts and figures that will give substance to the concept of a General Canadian English extending all the way from eastern Ontario to the Pacific Coast.

3.3 Special profile words

Apart from the systematic sound shifts we have just described, we undertook a second type of pronunciation study that dealt with words in which one or more sounds varied freely, producing different forms which we call "profiles." SVEN investigated 83 words with special pronunciation profiles and our SSPS computer program was able to identify the various patterns recorded by our informants and to arrange them in their order of frequency, thus giving us—as number one in the list—the overall preferred form.

The operative percentages shown below are derived by averaging from the scores in (usually) three different speech styles: the visual aural, the word list, and the reading passage. As the systematic change variables were numbered 1 to 39, the words with varying profiles, listed below, are numbered from 40 to 122.

40. sandwiches
41. vase
42. garage
43. groceries
44. theatre
45. schedule
46. fifth
47. February
48. arctic
49. British Columbia
50. Quebec
51. Newfoundland
52. Vancouver
53. Ottawa
54. Toronto
55. W
56. Z
57. beautiful
58. often
59. again
60. lieutenant
61. genuine
62. leisure(ly)
63. milk
64. congratulate
65. luxury
66. anything
67. any way
68. anywhere
69. sherbet
70. with
71. without
72. nuclear
73. always
74. either
75. neither
76. been
77. interesting
78. were
79. Washington
80. New Westminster
81. Oregon
82. Kitsilano
83. Capilano
84. Mary
85. mum
86. eh?
87. prestige
88. Sunday
89. Monday
90. Tuesday
91. Wednesday
92. Thursday
93. Friday
94. Saturday
95. oolichan
96. khaki
97. caramels
98. newspapers
99. vegetables
100. pumpkin
101. something
102. tomatoes
103. iron
104. apricots
105. recognize
106. asphalt
What follows is a sampling of the items in the list above. Generally the top three pronunciation profiles, along with corresponding percentages, are given.

Further insights into these pronunciations can be gained by studying the tables and cross-tabulations which break down these figures by age, sex, and socio-economic status. From a study of these tables (derived from the computer) we can see if there is any correlation between the forms preferred and the three sociological factors. After the overall pronunciation profiles, then, comes a discussion of sociological factors for some of the items.

40. SANDWICHES

['sænwidʒəz]: 26  ['sænwidʒəz]: 15  ['sændwidʒəz]: 14.
Five other profiles have scores of over 5%.

['sænwidʒəz]

WL (Word List) For the /m/ pronunciation in this style top score goes to male speakers (29%) and to group I, the lowest socio-economic class (36%).

VA (Visual Aural) Top scores are for males (44%) and class II (47%); note polarization between young males of classes I and II (50%) and old speakers of SES IV (10%).

RP (Reading Passage) The young have top score (20%) and the females top (17%).

['sænwidʒəz]

WL Step-by-step increase from young (14%) to middle (16%) to old speakers (25%). Males have top score (22%).

52
The same progression for young (12%), middle (13%), and old (30%), but this time females have top score (22%).

WL Stratification from young (9%) to middle (18%) to old (26%); females ahead with 21%, and SES stratified, (with a minor dip) from I (14%) to II (11%), to III (22%), to IV (25%). With all three sociological factors correlated, young males I (8%) and II (6%) show strong polarization compared with old speakers M III (46%) and F IV (40%).

VA Age, sex, and SES are again polarized or stratified--Y (11%), M (18%), O (24%); M (15%), F (20%), I (12%), II (13%), III (17%), IV (28%). The same overall polarization arises: YM-I (10%) versus OF-IV (60%).

RP Similar step-by-step percentages: Y to O (4%-9%); M to F (5%-7%); I to IV (4%-12%), along with three-factor polarization: YM-I and -II, YF-I and -II (all 0%) vs. OF-IV (20%).

41. VASE

[vaːz]: 56  [veɪz]: 21  [vɔz]: 11.
A fourth form--[veis]--(generally considered American) scored 5%. There were 6 other pronunciation patterns. [veis] Who uses this pronunciation?

MC (Minimal Contrast) increasing popularity from O (16%) to M (25%) to Y (39%); F (32%) well ahead of M; top score I (28%) compared with IV (15%); overall three-factor correlation: YM-I (60%) versus OF-IV (10%) and OM-IV (0%).

WL Same stratification from O (17%) to M (24%) to Y (35%); F (31%) still well ahead of M; progression for SES, from IV (12%) to II (35%) and I (30%).

42. GARAGE

[ɡærədʒ]: 30  [ɡəˈrædʒ]: 16  [ɡəˈɹædʒ]: 13.
Four other forms scored more than 5%, and there were a further 13 pronunciation profiles.

[ɡəˈɹædʒ]

WL Top score for the young (49%) and SES IV (43%); widest gap in three-factor table between OF IV (10%) and YM IV (80%).

VA Once again top score for the young (48%) and SES IV (40%); this time females ahead with 38%; same wide gap in SES IV three-factor table: OF (20%) vs. YM (70%).
RP The young (29%), the females (28%), and class IV (30%) all in the lead.

WL SES I (25%) well ahead and also the middle age group (22%).

VA Progression from Y (11%) to O (23%)

RP Females ahead with (18%); progression from IV (5%) to I (22%).

WL Progression from Y (6%) to O (23%); males in lead with 20%; SES IV top with 26%.

VA Progression from Y (3%) to O (15%); males ahead with 14%; SES scores range from I (2%) to IV (18%).

RP Progression from Y (10%) to O (21%); males have top score with 15%; SES scores range from I (8%) to IV (20%).

43. GROCERIES

[ˈɡrɔːris]  67   [ˈɡrɔːris]  33  The latter, [ˈɡrɔɔˈris], is a new pronunciation.

WL Favoured by Y (31%), M (27%), and class I (37%). In the three-factor table there is polarization between OF-IV and OM-IV (0%) and YM-I (46%) and YM-II (50%).

VA The young (40%), the females (33%), and SES I score top figures here. Once again, the three factors show extreme polarization between OF-IV (0%) and YM-I (60%), YM-II (60%) and YM-II (70%).

44. THEATRE


Plus 5 other profiles.

45. SCHEDULE


Plus 26 other profiles. [ˈfɛd-] This pronunciation is losing ground.

WL Favoured by the old (21%), the males (20%), and SES IV (31%). The three-factor table shows extreme polarization between YM-I (0%) and OM-IV (60%).
VA The same pattern—old speakers ahead with 27%, the males likewise with 25%, and SES IV with 35%, hence the same polarization between YM-I and II as well as YF-I and II all with 0% and OM-IV with 60%.

RP Same distribution again—the old (30%), the males (25%), and SES IV (38%) are all ahead; hence a similar polarization in the three-factor table.

47. FEBRUARY

[ˈfɛbruəriː]: 20  [ˈfɛbruəriː]: 15  [ˈfɛbruəriː]: 12.
Plus 29 other forms.

[ˈfɛbru(w)ɛriː]

In all three styles (WL, VA, and RP) this pronunciation was favoured by the young, the females and SES I and II.

[ˈfɛbru(w)ɛriː]

WL The females (30%) and SES IV (35%) were in the lead and we find three-factor polarization between YM-I (0%) and OF-IV (30%).

VA The lead is with the males (35%) and class IV (43%) and we have a less marked polarization between YM-I (10%) and OF-IV (30%) and OM-IV (60%).

RP Top scores go to the young (28%), the males (27%), and class III (32%).

48. ARCTIC

[ˈɑːttɪk]: 39  [ˈɑːktɪk]: 29  [ˈɑːtɪk]: 13.
Plus 2 other forms. Who is restoring the frequently deleted first /k/: [ˈɑːktɪk]? Influence of TV ads?

WL The young lead with 56%, and the upper SES III and IV with 62% and 69%, respectively.

VA The young lead here too with 33% and SES III and IV with 38% and 46%.

49. BRITISH COLUMBIA

[ˈbɹɪdɪf ˈkələmbiə]: 49  [ˈbɒrdɪf ˈkələmbiə]: 23  [ˈbɹɪtɪʃ ˈkələmbiə]: 13.
Plus 10 other versions. Who says [ˈbɹɪdɪf ˈkələmbiə]?

WL The young (24%) and the males (25%) lead, and also class III (27%).
VA The young (45%) and the males (47%) lead again, and also SES I (47%) and II (50%). This time we see three-factor polarization between YM-I (60%) and OF-IV (30%) as well as OM-IV (20%).

52. VANCOUVER

[væn 'kuvər]: 55 [væn 'kuvər]: 42. Plus 3 others. Stress varies. Who says [væn 'kuvər]?

WL The middle age group (60%), the males (50%), and SES I (52%) are in the lead here.

VA This time the middle age group (44%), the females (45%) and SES II (43%) are ahead.

RP Top scores are the young (83%), the females (81%), and SES II (85%).

53. OTTAWA

[ˈɒtəwə]: 25 [ˈptəwə]: 10 [ˈptəwə]: 7. Plus 20 other profiles. Who uses [ˈɒtəwə]?

WL Top score goes to the young (49%), the males (33%), and SES II (42%).

VA The young again (35%), the females (29%), and SES II again (35%) and this time score highest.

RP The young once again (84%), the males (75%), and SES I (75%) are top scores and there is polarization between OF-IV and OM-IV both with 40% versus YM-I (92%).

[ˈɒtəwə] Who retains the /u/?

WL The old (43%), the females (36%), and SES IV (31%) are in the lead.

VA The middle age group (27%), the females (18%), and SES III and IV (both with 22%) are leading.

RP The old (18%), the females (22%), and SES IV (29%) have the top scores, and we have polarization between YM-I and YF-I, both with 0%, in contrast with OM-IV (60%) and OF-IV (50%).

54. TORONTO

[toˈrɔntəʊ]: 22 [ˈtɔntəʊ]: 1 [təˈrantəʊ]: 9.
Plus 41 other patterns.

56. THE LETTER Z

[zɛd]: 77  [zl]: 20
Who says [zl]?

VA The young (31%), the males (22%), and class I (39%) have the top scores and we have strong polarization between YM-I (69%) and OM-IV, OF-II, OF-III and OF-IV—all with 0%.

57. BEAUTIFUL

[bju:ˈdɛfə]: 65  [bjuːˈdɛfə]: 17  [bjuːˈdifə]: 6.
Plus 9 other versions.

58. OFTEN

[əfən]: 50  [əfən]: 38  [əfən]: 12.
Plus one other. Who uses [əfən], ignoring the /t/?

WL The old (52%), the females (44%), and SES III (45%) are the leading scorers here.

VA Again, the old (54%), and the females (44%), but this time SES IV (53%) are in the lead, and there is polarization between YM-I (30%) and OF-IV (70%).

RP Once again, the old (72%), and the females (70%), and both SES III and IV (72%) are top scorers.

59. AGAIN

[əˈgeɪn]: 50  [əɡən]: 47.
Plus one other.

60. LIEUTENANT

[ljuˈtɛnənt]: 56  [ljuˈtɛnənt]: 41.
Plus one other. Who adds the /t/?

WL The old (71%), the males (44%), and SES IV (62%) are top scorers and there is extreme polarization between YM-I (0%) and OM-IV (80%) as well as OF-IV (70%), although the highest score is actually OM III (85%).
[lu'tenənt] Who says /lu/?

WL The young (82%), the females (59%), and SES I (73%); there is strong polarization between YM-I (100%) and OM-IV (20%).

61. GENUINE

[-ɪn]: 53 [-aɪn] (to rhyme with wine): 42.
Plus one other. Who says [u3ɛnjuəɪn] (rhyming with wine)?

WL The young (51%), the males (47%), and SES I (62%); polarization between YM-I (69%) and OM-IV (10%).

62. LEISURE

['lɛʒər]: 55 ['li:ʒər]: 45

64. CONGRATULATE(D)

[-'grætʃ-]: 66 [-'grædʒ-]: 31.
Plus one other. Who says [-'grædʒ-]? A new style.

WL Top score for the young (51%), females (26%), SES I and II (27% and 31%).

RP The young (60%), the males (39%), and SES I (49%) are top.

65. LUXURY

[laŋkʃ-]: 84 [laŋʒ-]: 9 [lækʃ-]: 7.
Plus one other.

69. SHERBET

[-bɪt]: 55 [-bɜːt]: 44.
Plus one other, Who says [ʃɛrbeit]?

WL The young (62%), the males (46%), and SES I (48%) and II (58%); extreme polarization between YM-I (69%) and OM-IV as well as OF-IV--both with 0%.

70. WITH

[wɪθ] (rhymes with myth): 81 [wɪθ] (final consonant voiced, as in these): 19
71. WITHOUT

[wɪθ]-: 51  [wɪθ]-: 46.  
Plus 2 others.

72. NUCLEAR

[njuːklɪər]: 50  [ŋjʊklɪər]: 23  [njuːkjələr]: 13  [ŋjʊkjələr]: 5.  
Plus 5 other versions.  
Is [ŋukjələr] another new style?

WL The young have a big lead (40%), and the males (23%), and SES I (30%).

74. EITHER

[ɜː]: 66  [əɪ]: 33  
Who says [əɪ]?

WL The old (35%), the females (33%), and SES IV (42%) are the leading scorers.

75. NEITHER

[niː]: 67  [naɪr]-: 32  
NEITHER has almost identical overall figures to EITHER.

76. BEEN

[bɪn]: 72  [bɪn]: 28.  
Plus 2 other versions. Who uses [bɪn]?

MC The old (25%), the males (17%), and SES II (18%) are top scorers.  
WL The old (19%), the females (12%), and SES I have the highest scores.  
RP The young (60%), the females (62%), and class IV (63%) are in the lead.

77. INTERESTING

['ɪntərɪstɪŋ]: 25  ['ɪntərɪstɪŋ]: 24  ['ɪntəstɪŋ]: 16.  
Plus 40 other profiles.
82. KITSILANO

[-lɑɪn-]: 46  ['lɑ:n-]: 36  [-læn-]: 14.
Plus 5 other patterns (see page 75).

85. MUM

[mʌm]: 92  [mɒm]: 8.
Plus one other.

86. EH?

[ɛː]: 85.
Plus eight other versions.

88.-94. DAYS OF THE WEEK

-<day>= [-dæi]  or [-dɪ]
Sunday:  [-dæi] 53  [-dɪ] 47
Monday:  [-dæi] 47  [-dɪ] 53
Tuesday: [-dæi] 57  [-dɪ] 42 + 2 other variants
Wednesday: [-dæi] 57  [-dɪ] 35 + 5 other variants
Thursday: [-dæi] 45  [-dɪ] 55
Friday:  [-dæi] 44  [-dɪ] 56
Saturday: [-dæi] 62  [-dɪ] 31 + 6 other variants
Overall average: 52  46

90. TUESDAY

[tʃuːz-]: 56  [tʃuːz-]: 35  [tʃz-] (= chooz): 8

94. SATURDAY

[ˈseːθər-]: 5  [ˈseːθər-]: 33  [ˈsʊʔər-]: 3  [ˈsʊʔər-]: 2
95. OOLICHAN

[ʊ̃l̩əkən]: 55  [uɬəɡən]: 21  [ulɪtɡən]: 7.
Plus 3 other profiles (see page 71).

96. KHAKI

[ˈkɔːki]: 42  [ˈkæki]: 30  [kɑːki]: 14.
Plus one other. Who says [ˈkɑːki]?

WL The old (66%), the males (44%), and SES III (50%) are the leading scorers and there is a strong polarization between YM-I (0%), YF-I and II (0%) and OM-IV and OF-IV--both with 70%--although OM-III has an even higher score (92%) and OF-II has (86%).

97. CARAMEL

[ˈkærəmɛl]: 37  [ˈkærəmɛl]: 28  [ˈkærəmɛl]: 10.
Plus eight others.

98. NEWSPAPERS

[n(j)uːs-]: 65  [n(j)uːz-]: 35

99. VEGETABLES

[ˈvɛdʒtəbətəz]: 62  [vɛdʒtəbətəz]: 30.
Plus six other versions.

102. TOMATO

[teˈmeidou]: 55  [teˈmeiˈtu]: 19  [teˈmædou]: 4  [teˈmeætu]: 2.
Plus 29 other profiles.

[teˈmeidou] Who voices the medial /t/?

WL The young (86%), the males (77%), and SES II (81%) have the highest scores and there is a strong polarization between YM-I (93%) and OF-IV (20%).

VA Once again, the young (94%), the males (80%), and SES II (85%) have the top scores and there is marked polarization between YM-I (100%) and OM-IV and OF-IV--both with 40%.
The middle age group (92%), the males (82%), and SES II (89%) are the top scorers, and once again there is polarization between YM-II and YF-II (both with 100%) and OF-IV with 30%.

104. APRICOTS

[eapriktəs]: 51  [æpriktəs]: 47.
Plus two others.

106. ASPHALT

[æsfɔlt]: 62  [əsfaːt]: 31.
Plus four others.
[æsfɔlt] Who uses the rounded /o/ in the second syllable?

WL The middle age group (66%), the males (63%), and SES I (77%) show the highest scores, and there is polarization between YM-I (80%) and OM-IV (10%), although MM-II has actually the highest score with 100%.

108. POTATO

[pə'teɪdəu]: 56  [pə'teɪdəu]: 16  [pə'teɪda]: 11  [pə'deɪdəu]: 5.
Plus four other versions.

109. ORANGE(S)

[ɔrændʒ]: 42  [ɔrændʒ]: 37  [ɔrændʒ]: 8  [ɔrændʒ]: 8
Plus six other profiles.

111. DETAILS (stress)

[ˈdɛtelz]: 99  [dɛtelz]: 1

113. PREFERABLE (stress)

[ˈprɛfərəbəl]: 60  [prɛferəbəl]: 40

114. CANADIAN

[kə'neɪdɪən]: 98  [kəneɪdʒən]: 2
115. OUR
[œː]: 40  [ɔːr]: 36  [ˈəʊər]: 23.
Plus one more.

116. GUARANTEE
[ˈɡærənti]: 49  [ˈɡærənti]: 26  [ˈɡərənti]: 18.
Plus three others.

118. WHEELBARROW
[ˈwilbɛərəu]: 38  [ˈwilbæərəu]: 25  [ˈwilbæərə]: 14  [ˈwilbæəə]: 6  [ˈwilbæəə]: 4
[ˈwilb8ərəu] Who uses this form with /æ/ instead of /æə/?

WL The young (57%), the males (36%), and SES IV (42%) have the top scores, and there is polarization between YM-I (62%) and OF-IV (0%).

VA Once again, the young (65%) and the males (46%) have the highest scores but this time SES I and SES III are highest, both having 47%. There is polarization between YM-I (80%) and OM-IV (0%).

[ˈwilbæərəu] Who uses this form with /æə/?

WL The middle age group (34%), the males (29%), and SES I (30%) show the highest scores.

VA The old (33%), the females (23%), and SES IV (25%) are the top scorers.

[ˈwilbæərə] Who still has the voiceless wh /hw/?

WL the old (26%), the females (13%), and SES IV (17%) have the highest scores for initial /hw/.

120. LIBRARY
[ˈlaɪbrəri]: 49  [ˈlaɪbrəri]: 21  [ˈlaɪbrəri]: 17  [ˈlaɪbrəri]: 9  [ˈlaɪbrəri]: 5.
Plus two others.

[ˈlaɪbrəri] Who uses the profile?
WL The young (80%), the females (68%), and SES IV (74%) were the top scorers. There is polarization between YF-IV (100%) and OF-IV (40%).

VA The young (56%), the females (51%), and SES IV (57%) were once again the top scorers. There is the same polarization between YF-IV (80%) and OF-IV (30%).

RP The young (57%), the females (53%), and SES IV (51%) have for the third time top scores. There is polarization between YF-II (85%) and OF-IV (30%).

[latiba] Who uses this form?

WL The middle age group (26%), the males (25%), and SES I (26%) show the highest scores.

VA The middle age group (41%), the males (41%), and SES I (48%) once again show the highest scores.

RP The young (11%), the males (7%), and class III (10%) show top scores.

[latbri]

WL The old (18%), the females (10%), and class I (12%) score the highest.

VA The old (29%), the males (17%), and SES I and III (18% for both) have the highest scores.

RP The old (42%), the males (26%), and SES I (35%) scored the highest.

121. MIRROR

[mi:] 43  [mi:] 26  [mi:] 5  [mi:] 3.
Plus eight other versions.

122. MOUNTAIN

Plus eight other profiles—see Variable # 8, page 42.

3.4 Potential rhyme words

Apart from the two approaches to the study of pronunciation just discussed (i.e., systematic sound variation and special profile words), one further aspect of our preliminary research on SVEN’s phonological results merits at least a brief comment. The database for this additional study was created using specially commanded
computer printouts in which selected words and juxtaposed word pairs were listed to discover what actually happened when a given sound should—according to our expectation—be repeated in close proximity. The full list of words, phrases, and pairs of words studied in this way is given below:

**Visual-Aural Style**

typewriter
Ottawa

**Word List**

cook book
ypewriter
salted almonds
father-in-law
our house
dental centre
Grouse Mountain
without a doubt
Where were you?
Ottawa

**Minimal Contrast**

dew/due
marry/Mary
chants/chance
caller/collar
tutor/Tudor
cot/cought
very/vary
putting/ pudding
sense/cents
prince/prints
were/where
false/faults
stalk/stock

**Reading Passage**

bother...father
father’s Falcon
enjoying being
good cook
daughter-in-law
Saturday...Sunday
hot water
in front of ... dentist's
Mary ... Barry
interesting meeting
Ottawa

This investigation stems from an observation of our fieldworker that speakers were sometimes inconsistent in the repeated production of sounds expected to be identical—
if these sounds occurred in close succession. This phenomenon could be called technically a type of dissimulation.

An example of two vowels expected to sound the same would be the first and last vowels in Ottawa which are both identifiable with the vowel in pot. This "pot-vowel," however, may be pronounced by Canadians in two ways: either with slight lip-rounding [o] (which is the norm for British speakers), or without lip-rounding (the usual American version, [ɑ]). In Canada these two articulations vary freely. For the word in question (Ottawa) many speakers consistently used either two rounded or two unrounded vowels. Some were not consistent, however, using the rounded vowel initially and the unrounded one finally, or vice versa.

Let us look more closely at some further instances of this dissimulation phenomenon: Q.532 (questionnaire, section III, Word List question 532) involved the phrase dental centre, in which the consonant cluster /nt/ occurred twice. The overwhelming majority (85%) consistently pronounced /nt/ in both words, while 3%—equally consistent—pronounced /nt/ in both. On the other hand, 5% had /nt/ in the first word and /nt/ in the second while 2% had /nt/ and /nt/ in the opposite order.

Q.1426 (section VI, Reading Passage) had the phrase in front of the dentist's office. In this much more casual style the results are somewhat different. Only 27% of the speakers were consistent, 18% keeping /nt/ in both words and 9% changing it to /nt/ in both. The rest were inconsistent: 34% had /nt/ in the word front but /nt/ in dentist; 24% had (0), i.e., zero, in the first but /nt/ in the second, while 5% had a glottal stop /nt/ in the first and /nt/ in the second.

The word typewriter also occurred in two styles. We expected it to produce two examples of the special Canadian diphthong [əɪ], one in type and one in writer. In Q.363 (Word List style) 93% lived up to this expectation, but 7%—inconsistently—used [əɪ] in either the first or second instance. In Q.731 in a somewhat less formal style Visual-Aural Prompting—86% had the Canadian diphthong in both cases, 1%, also consistently, had the non-Canadian [əɪ]. The remaining 13% were inconsistent, using the [əɪ] either in the first or second element of this compound.

The Word List section (Q.592) had a phrase involving the other characteristic Canadian diphthong [əʊ], namely without a doubt. Once again 93% of our speakers produced the expected Canadian version of this sound, while 2% used the non-Canadian [əʊ].
The rest (5%) were inconsistent: 2% in the word *without* had [ɔə] and 3% in *doubt* had [əə].

In the Reading Passage (Q.1476) the words *interesting* and *mealing* occurred close together. As far as the -*ing* ending was concerned, only 47% pronounced it consistently: 43% had /ɪŋ/, 2% had /ɪn/, and another 2% had /ɪŋ/ in both words. Of the inconsistent speakers (45% of the total), 18% had /ɪŋ/ in the first case and /ɪn/ in the second; 16% had /ɪŋ/ and /ɪŋ/; 4% had /ɪn/ and /ɪŋ/; 5% had /ɪn/ and /ɪŋ/ and 3% had /ɪŋ/ and /ɪŋ/.

In the Minimal-Contrast style—the most formal—we had the words *dew* and *due* for Q.899. Some 72% of our informants gave consistent pronunciations for both these words: 43% had /dju/ for both words and 29% had /dʌ/ in both. Among the inconsistent speakers, for the *first* and *second* words respectively, 8% had /dʌ/ and /dju/, while 18% had /dju/ and /dʌ/.

We particularly wanted to check on the consistency of pronunciation between the words *cot* and *caught*, which appeared side by side in Q.955 (Minimal Contrast). It has long been claimed that for Canadians the pronunciation is the same for both, whereas other speakers from the central and eastern U.S. from England, and elsewhere, make some distinction between them. For Canada, the vowels in question are the rounded and unrounded articulations discussed in connection with the word *Ottawa* (see page 66), i.e., the two realizations of the "pat-vowel." Our figures show that—as predicted—98% of our speakers were consistent in making no distinction between these two words: 91% used the rounded form of the vowel in both cases and 7% the unrounded one. The very minor fluctuations never amounted to even one half of one percent in any instance.

We have many more examples of these "rhyme" words, but those dealt with above demonstrate sufficiently that interesting things happen when two theoretically identical sounds occur close together. It is clear, for example, that style may play a role in this particular aspect of variability as in the case of /ɪn/. From these test situations we also have clear evidence of stabilization, particularly in the case of Canadian phenomena such as the special diphthongs in *typewriter* and *without a doubt*, as well as the lack of contrast between the vowels of words like *cot* on the one hand and *caught* on the other. These words are, of course, representative of very large classes in the vocabulary, which therefore put their stamp on the whole pattern of Canadian English. They become characteristic language markers. Further interesting research will undoubtedly come out of these data.

4. VOCABULARY

4.1 Local words

Among all the parts of the SVEN questionnaire that were concerned with vocabulary section V is of particular interest, as its purpose was to investigate the survival,
currency, and semantic interpretation of a small set of lexical items found locally on the
Canadian West Coast and which should be—were hoped—known and used by many
Vancouverites (see also Gregg 1996). As it turned out, our hopes proved to be well
founded.

These words stem in many cases from the Chinook Jargon, a once widely used contact
language, current even before the arrival of the first white explorers and traders among
the native Indian tribes of the old Pacific Northwest, who spoke many different and
mutually unintelligible languages. The Europeans had to acquire Chinook for purposes
of communication, and, at the same time, the Chinook Jargon had to expand by
adopting and adapting English and French terms in order to refer to the unfamiliar
objects introduced by the newcomers.

The list of words investigated include the following: SALTCHUCK, SKOOKUM,
SIWASH, a SQUAMISH, COLICHAN, SLOUGH, KITSILANO, SASKIE, SASKABUSH,
the last two being added during the course of the survey. If informants knew the item in
question they were asked: What does this word mean? Have you ever heard it? Have
you used it yourself? Occasionally they were asked about pronunciation and spelling.

The statistically-oriented nature of the questionnaire means, naturally, that the most
important feature of this type of survey is quantification—finding raw scores and
percentages for the whole population interviewed, as well as for subgroups of males
and females; young, middle, and old age groups; also, when appropriate, groups
representative of the different socio-economic levels and even subgroups such as
teachers—using cross-tabulations for purposes of correlation. Unless otherwise
indicated, figures refer to the 300 interviews of SVEN and the pilot survey combined.

Our computer program—SPSS—has furnished us with abundant statistical information
on these local lexical items.

4.1.1. SALTCHUCK

Originally a hybrid Chinook Jargon compound from English salt plus Nootka ch'aa:k
"water," our figures tell us that it is clearly holding its own, being known by 89% of all
our 300 informants. A more detailed breakdown by sex shows that it was known by
more of the men (93%) than the women (84%), while, if we look at the age factor as
well, we find that the two older groups have a clear lead (men: 100%; women: 88%)
over the young speakers (men: 82%; women: 66%).

The meaning of the term for the overwhelming majority of the men (83%) was "salt
water," "sea water," "sea," or "ocean." Of the women, 69% gave similar definitions. For
a small number saltchuck referred to "tidal flats" or "river estuary." The word had
actually been heard by 96% of the men and 87% of the women, and was actively used
by 72% of the former but only 38% of the latter.

Only ten of the young women (20%) had used this word. Three informants who had not
heard the word had met it in their reading. Four knew it was a Chinook term or thought
it had come from an Indian language. Eleven called it a fishing or sailing term. Some 8% thought its reference was restricted to the Vancouver area.

Thus, in brief, saltchuck is a man's word rather than a woman's, well preserved among the old group but losing ground among the young, especially the young women.

4.1.2 SKOOKUM

Skookum is a Chinook Jargon word from Chehalis skukm, "big," "strong." It was not quite so well known in general as saltchuck. However, more than three-quarters of all our informants knew it, more among the men (83%) than the women (72%). A further breakdown by age shows it was known by all of the old group of men, by 92% of the middle group, but only 60% of the young. Figures from the women were down to only 42% for the young, but 79% for the middle group and 94% for the old.

For 64% of the men the meaning covered the semantic range of big, strong, sturdy, husky, hefty, healthy and energetic; of the women, a total of 35% gave the same definitions. Less specific meanings ("very good," "O.K.," "fine") were offered by 33% of the women but only 18% of the men. "Neat" or "trim" was chosen by two men and two women.

Skookum had been heard (live) by 94% of the men and 78% of the women, but a further 3% of the latter had heard the word on TV or read it. Of the young women 50% had not heard it as against 8% of the two older groups. The gap between male and female familiarity with the word was even greater as far as active use was concerned: 58% of the men had used it but only 32% of the women. For women however, there was an additional semantic reference to a child: a little skookum meant "a mischievous little guy."

The additional information question brought out the expressions skookumchuck, "rapids," "white water," a "tidal rip," from 18 men (12%) and 12 women (9%), and from one woman skookum dandy. Twenty men (13%) and 11 women (7%) said the word was borrowed from Chinook or an Indian language.

On the whole, skookum is again a man's word rather than a woman's, especially with regard to use, and a word more likely to be familiar to the older rather than the young speakers.

4.1.3 SIWASH

Siwash is a Chinook Jargon word, from French sauvage meaning "native Indian." It was known by only 56% of all our informants, and the breakdown by sex gave an identical figure this time—56% for both male and female speakers. A further breakdown by age categories—old, middle, and young—showed 94%, 85%, and 14% for the male group, and 88%, 60%, and 20% for the female. In contrast with the two previous items,
therefore, the young women had a higher score for this word than the young men.

Siwash had been heard by smaller numbers than the first two words: 53% of our male population and 51% of the female. A further 2% of men and 8% of women had read the word or had learned it in school. Only 16% of the male group claimed to have used siwash: 33% in the old group, 19% in the middle, and none in the young. Of the women only 13% claimed to have used the term: 26% of the old group, 10% of the middle, and only 2% of the young. There is thus a sharp decline in use here across the age groups, dropping to almost zero with the young people—both male and female.

Both sexes gave a similar range of meanings for siwash: "Indian," "local Indian" or "Coast Indian" (men: 49%; women: 46%); "Indian woman" (men: 3%, women: 4%); "half-breed" (men: 1%; women: 3%); "lazy, dirty, bad, crazy Indian" (men: 2%; women: 3%). To a special question, 88% of the males and 82% of the female speakers answered that they regarded the word as derogatory.

As for additional information, the men came up with phrases such as to be siwashed "to be tricked," Siwash klootch "Indian woman," to go siwashing "to camp out," Siwash sweater (now taboo and replaced by Indian sweater or Cowichan sweater); the women furnished to get siwashed "to be legally barred from buying liquor."

In summary, siwash is a word known equally to males and females in general. However, when we compare those who know the word in the old and young groups a dramatic drop is seen: from 94% to 14% for the men, and for the women, from 88% to 20%. The fact that the word has become derogatory obviously means that it is avoided as stigmatized and consequently its use has dwindled to virtually zero with young speakers.

4.1.4 SQUAMISH

This item was not investigated in the pilot survey, but was introduced just after the beginning of SVEN. Rather than to the full quota of 300, the data thus refer to a population of 236, split exactly 50/50 by sex. The term was known by 49% of this group. Of the men, 61% said they knew it, but well over half of those who did not know it were in the young male category (57%). Only 37% of the women knew it, and almost half of those who didn’t were in the young female category. Of the men 64% had heard the expression but only 40% had used it. Of the women only 38% had heard it and 22% had used it.

Squamish is the name of a local town at the north end of Howe Sound but our informants were asked if they knew this word in reference to a wind (Q.851). The wind in question blows from the neighboring valleys down this inlet. This precise location was known by 21% of the men and 7% of the women. It was defined rather vaguely as "a local wind" by 31% of the men and 18% of the women; more precisely, as "a storm," "a sudden storm," "bad weather," "a strong or high wind," or "a squall," by 26% of the men and 14% of the women. Some phrasal uses—Squamish wind, Squamish squall—
were put forward.

As in the case of the words already covered, Squamish, with the semantic implications suggested, is once again better known and more frequently heard and used by the men than the women, but about half of the young speakers do not know it at all.

4.1.5 OOLICHAN

Oolichan is derived from Chinook Jargon ʔıłáḵən "a small fish"; the technical name is Thaleichthys pacificus. Oolichan was known to 82% of our informants—to 85% of the men and 78% of the women; it was not known to 28% of the young males and to 44% of the young females. Of the men, 87% had heard the word and 72% had used it. Among the women 81% had heard it but only 58% had used it.

Most of the men said it meant "a small fish" (54%); others said "an oily or greasy fish" (19%); "a smelt" (11%). Similarly 58% of the women said it was "a small fish;" 10% said "an oily or greasy fish," and 5% said "a smelt." Under the heading of additional information, 13% of the men and 6% of the women gave another local synonym for oolichan, namely candlefish.

For this word we investigated the pronunciation and actually found some unexpected variables. Overall the preferred form was /ˈuləkən/ (55%) with strong stress on the first syllable, the second and third being weakly stressed so that the vowels (written as [ə]) have the neutral quality of the u in circus. In second place was the form /ˈuləɡən/ (25%), in which the original /k/ sound was replaced by a /ɡ/ sound, and some 6% fluctuated between these two pronunciations. The form /ˈultəɡən/ (7%) came in third place. Spelling pronunciations cropped up in a few cases: /ˈuləʃən/ with /ʃ/ instead of the /k/ sound, and /ˈuləkən/ which reflects the less common alternate spelling eulachon. An initial aspirate /h/ was added to some of these forms by 4% of our speakers.

The male and female groups were in substantial agreement with the general preferences in pronunciation, although there were some minor fluctuations:

1. /ˈuləkən/—men: 58%; women: 52%
2. /ˈuləɡən/—men: 23%; women: 27%
3. /ˈultəɡən/—men: 7%; women: 7%

Of the women, 5% prefixed the aspirate /h/, but only 3% of the men did so.

Once again, this is a word more familiar and more used among the men than the women and less so among the young speakers, especially the females. As for additional information, 196 (82%) provided none, but one said the term oolichan juice referred to the oil derived from the fish, and one knew that local Indians used oolichan oil in their lamps; six (3%) said these fish were caught by Indians and used as a source of oil as well, of course, as for eating; one said they were eaten raw or smoked; five were aware that the fish and its name had some connection with the Indians; one said
the word was known up the B.C. coast; three said the expression oolichan run referred to the seasonal appearance of the fish; three commented that some people confuse the word oolichan with hooligan, this confusion being reflected in the pronunciation (which we encountered and recorded) with initial h-

4.1.6 SASKIE

Derived from Squamish Salish tsatsg (see Gregg 1979b), this item cropped up during an open-line radio program and was added belatedly to our list. In spite of this delay, we have information from 203 (68%) of our informants. Saskie turned out to be a special phenomenon—a local word that was narrowly restricted geographically to the east side of Vancouver. Only 5 speakers, all from those districts, actually knew it. For 5 (three men and two women) it meant "the young, edible shoots of the salmonberry"; for one woman "the shoots of the raspberry"; for one woman, either of these; for one man, "a local flowering bush"; for one woman, "shoots of an unidentified bush." Only one speaker—male—pluralized the word. Only two knew it to be an Indian word. Among the men, it was known by two in the old group, one in the middle, and one in the young. None of the young women knew it; only one in the middle group but four in the old.

We seem to have caught this local word almost on the point of extinction—none of the young women and only one of the young men knew it. In this case, however, it was acknowledged to be a new borrowing from the North Vancouver Squamish (a Coast Salish language) just as it had been borrowed from a similar source earlier in this century.

4.1.7 SASKABUSH

Saskabush, derived from Saskatchewan or Saskatoon plus bush (see Gregg 1979b), was another late comer to our list, for which, however, we were able to elicit 173 responses. In general, only 67 (39%) knew this term: 55 of the men (60%) and only 12 of the women (15%). Over 62% of the old men and 97% of the old women didn't know it. It meant "Saskatchewan" or "Saskatoon" for 47% of the men and 9% of the women; "a person from either the province or city" for 9% of the men and 5% of the women.

It was thought to be a local West Coast term by 38% of the men and 36% of the women. Some 28% of the men and 18% of the women thought it was also used in Saskatchewan. Other terms for "prairie dwellers" were cited: Saskatchewan, Saskabushers, stubble jumpers, binder pilots, prairie chickens, stump ranchers. Edmonchuk, (evidently from the name of the Alberta city Edmonton and the Ukrainian family name element -chuk). The pronunciation /æd'meɪntʃʌk/ given by our informant was meant to suggest a Ukrainian pronunciation!

We are dealing here once again with a word more familiar to the men than the women, but this time it was the old speakers—particularly the women—who did not know it so well, and the two younger groups—especially the young and middle male informants.
who did know it.

Regarding words known to the urban young, English lexicographers involved in the production of *Collins English Dictionary* (1979, P. Hanks, ed.), including Managing Editor Thomas Hill Long (personal communication) have in recent years begun to pay attention to urban dialect words characteristic of various cities in the British Isles: Edinburgh, Glasgow, Belfast, Dublin, Bristol, Liverpool, and, of course, London. Such local lexical items might be regarded as specific markers of the urban speech in question.

4.1.8 SLOUGH

*SloUGH*, from Old English *slōh*, is, of course, not in any usual sense a local word but it has local references which are of semantic interest. It was known by the overwhelming majority (94%) of our informants in general--97% of the male and 90% of the female speakers. With such statistics there was no need to ask if the word had been heard or used.

"A body of dirty, dead, or low-lying water" was the meaning given by the largest group of both sexes (men: 21%; women: 24%); following closely came "a man-made runoff ditch" (men: 20%; women: 24%); third in line was "a backwater or arm of a river" (men: 17%; women: 10%); fourth was "a swamp or marsh" (men: 11%; women: 10%); fifth came "a drainage channel" (men: 11%; women: 9%); sixth, "a pond or small lake" (men: 11%; women: 8%); finally, "a tidal pool or flats" (men: 6%; women: 3%).

For this word the age categories did not seem to be significant except in the sub-group of those who did not know it: 3 of the young men (2%) and 14 (9%) of the young women, i.e., 11% of the young speakers, did not know the term, whereas only two--one old male speaker and one middle female (i.e., 1% of the two older groups) claimed not to know it.

Some 45 of the men and 35 of the women were able to locate sloughs for us in the Vancouver area: the Deas Slough near the Massey Tunnel; the South Surrey mud-flats; Richmond and Delta drainage ditches; the tidal area at Ambleside, West Vancouver; the Fraser River; the lower Fraser valley; in Vancouver proper, Blenheim, Point Grey, the Musqueam Reserve, Little Mountain; in North Vancouver; drainage ditches.

An ongoing dispute with some eastern Canadian colleagues had led the writer to believe that one possible source of a pronunciation variant that rhymes with *bough*--attributed, in my opinion erroneously, to British Columbia speakers--was the spelling: s-l-o-u-g-h. The word was therefore presented orally in the questions:

*What is a slough /slə/? How do you spell the word?*
To the latter question the majority—229 (85%)—opted, as might be expected, for the standard orthography (men: 89%; women: 81%); 24 (9%) however, spelled it s-l-e-w (men: 8%; women: 10%); four women spelled it s-l-u-e; one man hesitated between these last two spellings and among other individual spellings were: s-l-e-u-g-h, s-l-o-u, s-l-u-g-h. In any case, the pronunciation for everyone was /slu/. No one claimed it should be /slat/ (to rhyme with bough). Perhaps those 15% who were unfamiliar with the standard spelling would not identify s-l-o-u-g-h with their word /slu/ and would consequently pronounce s-l-o-u-g-h (if they met it in print) as /slat/.

Age and sex seemed not to have affected knowledge of this word. Apart from the fact that 14 young females did not know it, the rest of our informants scored very well on this item. Among the other women, all the old speakers knew it and only one of the middle group did not. Of the men, three young speakers and one old did not know it but all the middle group knew it.

4.1.9 Co-variation with socio-economic background

In order to provide a simple dichotomized breakdown for purposes of comparison, our top two socio-economic categories (III and IV) were grouped together as were our two lower categories (I and II).

In fact, as far as knowledge and use are concerned, it turns out that the socio-economic background of the speakers is not reflected in any way for five out of the nine local lexical items under study. The following tabulation gives the figures:

<table>
<thead>
<tr>
<th>Word</th>
<th>Group</th>
<th>Known (%)</th>
<th>Used (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SALTCHEUCK</td>
<td>Lower</td>
<td>89</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>Upper</td>
<td>98</td>
<td>55</td>
</tr>
<tr>
<td>SKOOKUM</td>
<td>Lower</td>
<td>76</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Upper</td>
<td>79</td>
<td>49</td>
</tr>
<tr>
<td>SIWASH</td>
<td>Lower</td>
<td>55</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Upper</td>
<td>56</td>
<td>44</td>
</tr>
<tr>
<td>OOLICCHAN</td>
<td>Lower</td>
<td>82</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>Upper</td>
<td>96</td>
<td>58</td>
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<tr>
<td>SLOUGH</td>
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<td>91</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Upper</td>
<td>98</td>
<td>—</td>
</tr>
</tbody>
</table>

The figures for three other items do, however, vary considerably in relation to the speaker's socio-economic backgrounds:
<table>
<thead>
<tr>
<th>Word</th>
<th>Group</th>
<th>Known (%)</th>
<th>Used (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQUAMISH</td>
<td>Lower</td>
<td>35</td>
<td>20</td>
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<td></td>
<td>Upper</td>
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<td>SASKABUSH</td>
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<td></td>
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<tr>
<td></td>
<td>Upper</td>
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</tr>
</tbody>
</table>

As far as knowledge and use are concerned, Squamish here shows that the upper group has a strong lead of about two to one over the lower, but for Saskabush and Saskie it is the lower group that has the lead.

4.1.10  KITSILANO

Because it turned out to have special features of interest, the word Kitsilano is dealt with separately here and in more detail than the other items in our list. This local place name (derived ultimately from the name of a former Squamish Salishan chief) refers to a section of Vancouver on the south shore of English Bay. Our main reason for including it in our surveys was to check on the variant pronunciations of the vowel in the third syllable, which bears the primary stress, and to assess their sociolinguistic significance.

In spite of the fact that it is patently at variance with the spelling, the long [aɪ] sound as in life was used in the stressed syllable by almost half (48%) of our total population. The second largest group—35%—had a simple low vowel, [ɑ] like the a in father, and in third place came the much smaller group—6%—who favoured [æ] as in Anne. The remainder fluctuated between two of the variables—usually [aɪ] and a simple vowel. In this way a further 9% used [aɪ] at least some of the time. Two speakers actually opted for [eɪ] as in hay which they felt to be the proper pronunciation in view of the orthography!

Reviewing the data by sex, we discover that [aɪ] was used by almost equal numbers of women (49%) and men (48%), although more of the men (11%) fluctuated between [aɪ] and another variant than did the women (8%). Low vowels near [ɑ] were favoured by 39% of the female speakers but only 33% of the males, while 8% of the men used [æ] as against 5% of the women.

If we look at the three age groupings we find that [aɪ] is used increasingly by the young of both sexes. The actual increase from old to young for males is from 33% to 49% and, for females, from 45% to 51%.

Only a few (men: 3%; women: 4%) reduced the final /o/ to the weak /ə/-type vowel in
the final syllable, although a further 5% admitted to using this pronunciation occasionally.

These questions on the phonology of this word were followed by others relating to language awareness. The figures show, for example, that within both sex groups about three-quarters of the 239 speakers who had responded were aware of pronunciations of Kitsilano different from their own. To a further follow-up question, once again equal numbers of men and women—amounting to well over three-quarters of the 230 who responded—claimed they had not changed their pronunciation. Of the 22% who were aware of having changed, 12% did not know why. The remainder claimed they were influenced by their teachers or by the spelling, or thought they were moving towards the "Indian" form.

Out of the 260 informants who responded to a question about the possible source of the [aːʔ] pronunciation, 22% had no suggestions to make. Of the females 21% thought it was characteristic of the older generation of Vancouverites and 15% of the males thought likewise, whereas, on the contrary 12% of the men and 9% of the women identified it with the younger generation—an observation borne out by our figures. Some 11% of the males and 8% of the females stigmatized it as "a lazy, wrong, ignorant, or low-class pronunciation." Smaller numbers attributed it to dwellers in the Kitsilano area itself.

From the data elicited under the heading of background information, a special printout was made to check this suggestion. It proved to have some validity for those who were living in the Kitsilano area at the time of the SVEN interviews. There were 24 such informants and 54% of them used the [aːʔ] diphthong exclusively as against 48% for /aːʔ/ in the rest of the population. An even larger gap occurred in the case of those who alternated the /aːʔ/ diphthong with some other vowel nucleus: 17% of the Kitsilano dwellers but only 9% of the rest did so. Thus a total of 71% of the Kitsilano informants used /aːʔ/ at least some of the time, while the comparable figure for the rest of the speakers was only 58%. For those, however, who had lived in Kitsilano from age 6 to age 20 and then moved to some other district there was no tendency to favour the /aːʔ/ pronunciation, except when it was in alternation with some other vowel. In this case the former Kitsilano inhabitants cut the rest by 17% to 9% for the under twelves, and by 21% to 8% for the under twenties.

For the /aːʔ/ pronunciation, however, the largest groups of both sexes (men: 35%; women: 34%) simply said it was common usage in the community.

As for the notion of "correctness," 34% of the women and 28% of the men had no opinion to offer, but 30% of the females and 26% of the males (in both cases especially in the middle and young age groups) favoured /aːʔ/. A low vowel as in fāther was the choice of 28% of the women and, again, 26% of the men, while [aː] (as in Anne) was chosen by 13% of the males and 9% of the females.

From an analysis of the background information elicited at the beginning of each interview we discovered that 47 teachers—elementary and secondary—were included
among our 300 informants. Accordingly, in view of some speakers’ claim that teachers had influenced their pronunciation of Kitsilano we had a printout made of the performance of our teacher group. The figures show that 53% favour a low vowel ([o]), etc.) over the /æɪ/ diphthong used by 36%, and only 4% used [æ]. By way of contrast, the rest of our population—the non-teachers—showed 50% in favour of /æɪ/, 31% for a low vowel ([o], etc.) and 6% for /æ/. This reversal of the top two “preferred” pronunciations is even more interesting when we compare it with the breakdown by socio-economic classes. The dichotomy already mentioned showing the performance in general of the two lower categories versus contrast with the two upper categories gives a very clear picture. For the lower group the use of /æɪ/ is in leading position with 62%; low vowel ([o], etc.) is next with 20%, and /æɪ/ shows only 5%. For the upper group on the other hand the leading position goes to a low vowel ([o], etc.) with 51%, the diphthong /æɪ/ is in second place with 32%, and /æɪ/ is third with 7%. Thus we see that the teachers’ preferences correspond almost exactly with the choices of the upper socio-economic group and open the way to speculation about the role of teachers in the creation and maintenance of prestige forms.

4.2 General vocabulary

The strictly local words, i.e., those not found in any Canadian urban centre outside of British Columbia, have been dealt with in the previous section. The variant forms recorded by SVEN for other lexical items of more general distribution were elicited in section II of the questionnaire (Q.256 to Q.303), either with the help of pictures and maps or by aural prompting. In either case this section—by avoiding any direct use of the printed or written word—aimed at evoking a relaxed style of speech on the part of informants, which is particularly appropriate as most of the words involved have domestic reference—parts of the house, furnishings, etc.

4.2.1 Overall preferences

For our analysis of these results, let us consider first the overall preferences of the whole SVEN population:

Q.256 As the name for a floor covering, two-thirds chose CARPET (66%) rather than RUG (18%), while 9% vacillated between the two words and 4% offered the rather technical-sounding CARPETING.

Q.258 For the smaller, runner-type item the situation was reversed: 65% picked RUG this time; 22% said CARPET, and 12% fluctuated between these two forms.

Q.259 Almost three times as many used CAN (58%) rather than TIN (22%); 10% compounded these words as TIN CAN, while the rest were undecided, using all three words in various combinations.
Q.260 In this related question, on the other hand, there was an overwhelming majority in favour of the phrase CANNED FRUIT (92%). Only 4% said TINNED FRUIT and 2% hesitated between the two expressions.

Q.263 The long-acknowledged Canadianism CHESTERFIELD came out well ahead with 72%, over COUCH (16%), and SOFA (11%). Other forms did not rate even 1%. (See page 79.)

Q.263A When asked if they used any term other than the one offered, 35% said "no." For those who did use a second form, SOFA scored 27%; CHESTERFIELD and COUCH both 15%; SETTEE and DAVENPORT 2% in each case.

Q.264 Here TAP came out in the lead with 67% over FAUCET with 25%. Only 8% fluctuated between the two words.

Q.267 Here CUTLERY (46%) was the favoured term over FLATWARE (21%) and SILVERWARE (15%). The listing KNIVES, FORKS and SPOONS scored 8%, (TABLE) UTENSILS 3%, likewise TABLEWARE or DINNERWARE 3%. The simple word SILVER also rated 3%.

Q.271 The ubiquitous TELEVISION SET was so called by a mere 3% of our speakers; 95% chose to call it the TV, and only 2% opted for the usual British term TELLY. Less than 1% used both TV and TELLY.

Q.275 Among kitchen terms, the great majority picked FRYING PAN (82%) and FRY PAN came second with 9%. SKILLET rated only 3% but it alternated with FRYING PAN for 5% of SVEN informants.

Q.277 Still in the kitchen area, STOVE (72%) came well ahead of RANGE (7%) and ELECTRIC RANGE (4%); OVEN rated only 2%. The combined form ELECTRIC STOVE scored 10%, which might reasonably be added to the 72% score for STOVE. The other speakers fluctuated between two or even three of these words.

Q.278 Here 81% chose (WINDOW) BLIND or BLINDS while 11% used the term (WINDOW) SHADE or SHADERS, and the rest vacillated.

Q.279 The majority for this item picked DRAPES (51%) with CURTAINS a close second (44%). The rest used both.

Q.298 For the evening meal, DINNER was the term used exclusively by 14%, while SUPPER was the only name used by 5%. Both forms were used equally by 24%, but two other categories also had high scores: the largest group of all (36%) usually said DINNER but sometimes SUPPER, and 21% reversed this preference.

Q.262 Outside the house, the majority chose CUT THE GRASS (52%) rather than MOW THE LAWN (20%). The reverse verbal groupings scored as follows: CUT THE LAWN (17%) and MOW THE GRASS (5%). The remaining speakers fluctuated in their
usage.

Q 286 With reference to the vocabulary used in telling the time, our fieldworker drew clock-faces with the hands in different positions so as to avoid the use of printed or written stimulus words. With the hands showing 2:45, the overwhelming majority (96%) said (A) QUARTER TO THREE. Only 3% said TWO FORTY-FIVE. When asked about a second choice, however, 51% chose TWO FORTY-FIVE and only 4% said (A) QUARTER TO THREE. This time 38% claimed they did not have a second form. FIFTEEN (MINUTES) TO THREE was the form offered by 6%.

Q 290 With a different setting of the hands, the largest group chose (A) QUARTER AFTER ELEVEN (47%); 28% said (A) QUARTER PAST ELEVEN and 23% said ELEVEN FIFTEEN. For a second choice, this time the largest group picked ELEVEN FIFTEEN (48%), followed by (A) QUARTER AFTER (14%), (A) QUARTER PAST (6%) and FIFTEEN MINUTES AFTER (4%). Once again a sizable group (27%) maintained that they did not use a second form.

Q 292 Another setting of the clock hands gave TEN THIRTY a fourfold lead with 82% over against 18% for HALF PAST TEN. This time the majority (51%) answered that they did not have a second choice here. Among the other speakers, however, HALF PAST TEN was chosen as the second form by 35%, and TEN THIRTY by 13%.

Q 269 One other item closely associated with time was checked, namely TRAIN STATION (used by 45%) as against RAILWAY STATION (21%) and RAILROAD STATION (8%). The unqualified expression THE STATION scored 17%, but THE DEPOT only 4% and RAILWAY TERMINAL less than 1%. The rest vacillated.

Q 270 A somewhat different picture emerges when we look at the compound terms: RAILWAY TRACKS (40%) comes first, then RAILROAD TRACKS (38%) and TRAIN TRACKS (16%), while the simple terms TRACKS (2%) and THE RAILROAD (2%) are far behind in popularity.

4.2.2 Detailed semantic and sociological analysis of four terms: chesterfield, verandah, suite, khaki

Q 263 CHESTERFIELD, etc.

In the realm of general vocabulary, the preceding pages summarize the choices made by our informants as a whole group in relation to the variable items presented to them by audio-visual prompting.

Apart from this general approach to vocabulary, we have made a detailed, in-depth study of four items in order to demonstrate the possibility of collecting and analysing semantic information that would show what motivates discrimination among near synonyms. The computer, of course, can calculate the value of these semantic features in terms of percentages, and can allocate the choices thus assessed to the
various sociological categories into which our SVEN population is divided.

Thus in answer to Q.263 we have composite figures representing exclusive choice plus first choice, namely: CHESTERFIELD (72%), COUCH (16%), SOFA (11%) as shown on page 78. The exclusive figures alone are much lower: CHESTERFIELD only (30%), COUCH only (2%), SOFA only (2%). Some 7% of our speakers said they made no distinction between the three words; 15% would never use SOFA; 3% would not use COUCH; 4% called SOFA an American term, while 8% associated it with their parents' generation—an old-fashioned, traditional word. The essential semantic features of a CHESTERFIELD included its size: for 10% it had to be large; for 8% it had to be elegant, luxurious—a prestige item of furniture; 3% thought it must be comfortable to rate this word.

As for the sociological factors of age, sex, and SES in correlation with vocabulary, we note that the word CHESTERFIELD is used exclusively by 69% of the old males of SES group III (OM-III), whereas only 8% of the young males of SES group I use it exclusively. There is a similar polarization between the 46% of OF-III and 0% of YM-I who have CHESTERFIELD as their first choice and SOFA as their second choice. The YM-I score a little higher (23%) with CHESTERFIELD as first choice and COUCH as second, but on the whole the future of this acknowledged Canadianism—CHESTERFIELD—does not seem too bright. There is obvious decline in use among the young, for the young females score only marginally better than the males.

The factor of further education, to make matters worse, seems to correlate with a slight decline in the use of CHESTERFIELD, those with post-secondary education (+PSE) scoring 26% as against the -PSE group with 34%. Those with Grade 12+ scored 29% as against those with only Grade 11—33%. The figure for responses with first and second choices may give some indication of a possible replacement for CHESTERFIELD as first runner. Thus, if we look at the YM-I group, we find COUCH scores 23% as second choice with CHESTERFIELD as first. COUCH also scores 31% with YF-I in the same combination. Further, COUCH scores 23% with YM-I as first choice along with both SOFA and CHESTERFIELD as second choices. In the latter combination, COUCH scores 43% with YF-I and 28% with YM-II. The drift away from CHESTERFIELD from the oldest to the youngest speakers is, in any case, clear.

Q.281-85 VERANDAH, etc.

To elicit responses to this question a series of five pictures was presented to our informants. The first (Q.281) showed a large house with a covered structure that ran across the front and along one side. The second (Q.282) showed a covered structure that ran across only part of the front of the house. The third (Q.283) showed just a roof over the front door of the house. The fourth picture (Q.284) showed a covered structure only slightly wider than the door. The fifth picture (Q.285) showed a large screened-in structure running across the front of the house. The responses in terms of overall percentages for the whole SVEN population are tabulated below.
<table>
<thead>
<tr>
<th>Picture</th>
<th>Verandah</th>
<th>Porch</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1 (Q.281)</td>
<td>70%</td>
<td>17%</td>
<td>8%</td>
</tr>
<tr>
<td>#2 (Q.282)</td>
<td>37%</td>
<td>46%</td>
<td>9%</td>
</tr>
<tr>
<td>#3 (Q.283)</td>
<td></td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>#4 (Q.284)</td>
<td>8%</td>
<td>79%</td>
<td>2%</td>
</tr>
<tr>
<td>#5 (Q.285)</td>
<td>57%</td>
<td>34%</td>
<td>8%</td>
</tr>
</tbody>
</table>

These figures speak for themselves in that the majority agree to name the most elaborate structure a VERANDAH and the least pretentious, a PORCH. The semantic analysis bears this out as 62% replied that a VERANDAH had to be a large structure. It should have sitting accommodation for socializing and should act as a kind of extension of the living area of the house (18%), while for 22% a VERANDAH runs the length or the width of the whole house.

Some 5% considered VERANDAH as an old-fashioned term, while 5% made no distinction between VERANDAH and PORCH, and another 5% used PORCH exclusively.

The old speakers scored highest for VERANDAH (73%) as against the young (47%); the females (67%) as against the males (58%); the four SES groups differed little, ranging only from 60% to 86%. There was little sociological correlation with respect to the semantic features, and the same is true for the education factor.

The choice of PORCH exclusively showed the highest score for the young (11%) as against the old (1%), for the males (9%) versus the females (1%), and for SES group I (9%) versus SES group IV (2%). There is thus an extreme polarization for the exclusive use of PORCH when we cross-tabulate all three factors, YM-I scoring the top percentage of 33% as against the old members of SES groups II, III and IV who in all cases scored 0%.

Q.303  SUITE, etc.

This third item is, like CHESTERFIELD, another Canadianism, specifically, in the sense in question here, a western Canadianism. Where speakers elsewhere use APARTMENT or split the semantic field between FLAT and APARTMENT, our SVEN informants make the split between APARTMENT and SUITE. Our aim was to sort out the differences that our speakers perceive—if any—between these two terms.

The largest group who made a distinction (16%) claimed that a SUITE was not large, but, 11% claimed that it was. Some 20% said it was in a house but not in a block, while 10% stated that a SUITE was in an APARTMENT and that the latter term referred to the whole building or block. One-third—33%—said they did not differentiate between the two words.
The sociological factors did not correlate very clearly with any trend in the preferences. Both YM-I and OF-IV (at opposite extremes in every way) agreed unanimously that a SUITE is not large. The idea that it is small scored 30% with OF-IV as against 15% with YM-I. Other figures are not regularly stratified: more young speakers (31%) than old (12%) thought a SUITE would be in a house, not a block. On the other hand, more old (15%) thought it would be in an APARTMENT (building); for this definition the young scored 9%.

Q.140 KHAKI (Special profile word #96)

Some of the responses to this question (which investigated the currency of a pronunciation surviving from World War I--or earlier--/karki/) unexpectedly raised an interesting semantic problem. The replies showed that a high percentage of young people (and much smaller numbers in the middle and old age groups) do not appear to know this word in reference to army uniforms. When confronted with a coloured picture of a soldier they used some other colour word instead.

The young speakers who used a different colour word totalled 56%, the middle group 16%, and the old only 3%. Sex and SES showed little correlation, but the three-factor cross-tabulation shows 90% of YM-I not using khaki (strongly polarized against all the old speakers in classes III and IV) who show 0%. Another word or word sense on its way out?

5. GRAMMATICAL VARIABLES

5.1 Morphology and syntax

In planning section IV--the grammatical part of the questionnaire--we decided to try out a new approach, different from that used in the other parts of SVEN, and also different from the method used for checking grammar in other surveys. Instead of seeking a direct response which represented the informants' own usage, our fieldworker first asked them to listen to a number of sentences which said the same thing in different ways. Then she asked them which one they thought sounded most correct. Finally she asked them which one they themselves actually used, or whether they would say something different from all the forms proposed.

After a period of trial and error our programmer was able to furnish us with percentage figures for the speakers who judged a given form to be correct and also actually used it. She also gave us the corresponding figures for those who claimed a certain form to be correct but admitted to using some other form themselves. The discrepancy between the awareness of what is judged to be correct and the use of a form (felt to be incorrect) provides us with some useful input to the current controversy in grammar theory which contrasts linguistic competence (the theoretical knowledge we have of the grammar of our language) with performance (the way we use our language).
There is another important aspect of grammatical knowledge under investigation here. In every question, among the forms presented to informants for their judgment, there was always one which we knew must be considered as exclusively correct according to the tenets of traditional grammar, handed down to us historically by generations of prescriptive grammarians. There were, of course, many informants who chose this traditionally correct form, but many others were obviously unsure of it—some actually claiming to use this form but condemning it as incorrect!

Our statistics give us then—as overall percentages of the whole SVEN population—the figures for those who chose a given form as correct, those who actually used that "correct" form, and those who admitted they used another form which they knew to be "incorrect." More can be learned from the breakdowns we have of these figures, by sex, by age, and by socio-economic status, along with the usual cross-tabulations in which any two or all three of these social factors are correlated.

However, because we know that education plays such an important role in the acquisition of a knowledge of traditional grammar, we decided to obtain special printouts showing the scores for the most highly educated sector of our population—namely, those with post-secondary education (+PSE)—and, as an additional check, further printouts for the sizable group of teachers—there were 47 of them—who were identifiable in our randomly selected population sample. It is the statistical analysis of the figures relating to these groups that we will focus on. The responses of these groups are in many ways the most interesting, as the "preferred forms" for the post-secondary group will at the same time be "prestige forms," and the degree to which they measure up to the percentages scored by the teachers gives us a valuable perspective on the influence and effectiveness of the teaching.

We first discuss those questions dealing with prepositions and pronouns (examining special case forms: *time, etc.*); then specific verb forms (*drank/drunk, lie/lay, etc.*); then agreement (*there is/there are, etc.*); then conditional clauses (*if, etc.*), with the pluperfect tense and other verb structures; and, finally, some miscellaneous items. In the questionnaire, of course, this grouping of related items was avoided intentionally. Results are shown below for the special group of those who had post-secondary education (+PSE), followed by the figures for the larger group of the population who did not have it (-PSE). Then come the teachers' results. Under the heading "Correct" is given the percentage of each particular group who judged that form to be correct. Under the heading "Used" is given the percentage who used exclusively the form they thought to be correct. Obvious discrepancies arise from the fact that some speakers fluctuate in their usage between two or more forms.

Some comments on these results follow, although the statistics naturally speak for themselves. It should first be noted that the overall percentages for the whole population will fall between the +PSE and the -PSE figures. For example, for the first item—*different from*—the +PSE shows 70 and the -PSE, 52. The overall percentage was 61. Note also that all figures represent percentages.
5.1.1 Q.709 Different from/than

<table>
<thead>
<tr>
<th>Q.709</th>
<th>+PSE &quot;Correct&quot;</th>
<th>+PSE &quot;Used&quot;</th>
<th>-PSE &quot;Correct&quot;</th>
<th>-PSE &quot;Used&quot;</th>
<th>TEACHERS &quot;Correct&quot;</th>
<th>TEACHERS &quot;Used&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>different from</td>
<td>70</td>
<td>63</td>
<td>52</td>
<td>47</td>
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</tr>
<tr>
<td>different to</td>
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<td>4</td>
<td>9</td>
<td>9</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

For this first question (Q.709) the traditional "different from" is clearly in the lead within the +PSE group with 70, and at the same time this score is well ahead of the -PSE, 52. Both, however, fall behind the teachers’ 77.

5.1.2 Q.661 Back of/lin back of

The next question (Q.661) shows consistently high scores for "behind me"—all in the nineties, although +PSE and teachers are slightly ahead with 95. Once again, behind is the traditional form, avoided by some North American speakers because of its possible reference to the human posterior. This taboo is apparently less operative in Canada than in the U.S.

<table>
<thead>
<tr>
<th>Q.661 Q.665 Q.821</th>
<th>+PSE &quot;Correct&quot;</th>
<th>+PSE &quot;Used&quot;</th>
<th>-PSE &quot;Correct&quot;</th>
<th>-PSE &quot;Used&quot;</th>
<th>TEACHERS &quot;Correct&quot;</th>
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<td>behind me</td>
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</tr>
<tr>
<td>in back of me</td>
<td>--</td>
<td>--</td>
<td>3</td>
<td>2</td>
<td>--</td>
<td>--</td>
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<td>81</td>
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<td>6</td>
<td>17</td>
<td>17</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>in the back of the garage</td>
<td>4</td>
<td>3</td>
<td>7</td>
<td>6</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>
5.1.3 Nominative vs. accusative case usage

The next five questions we will look at (Q.689, 693, 697, 717, 785, 809) checked on the speakers' awareness of case: nominative (or subjective) versus accusative (or objective). In other words, the choice between I and me, or who and whom. These alternate pronoun forms are the only remaining trace in Modern English of the once highly elaborate case system characteristic of Old English and still found in related languages such as Modern German where it affects nouns and adjectives as well as pronouns. As a result of the evolution of the English language and its drastic simplification in this respect, many modern speakers have a poor grasp of what case relations mean, so that me may be used where I is traditionally correct and vice versa.

The use of me for I in subject position is stigmatized by many as a most egregious blunder, to which they overreact so violently that they fall into the opposite error of hypercorrection, namely the use of I when me is correct—hence such ungrammatical monstrosities as "between John and I," a horror perpetrated—alas!—not exclusively by the illiterate but by almost one-third of the +PSE group and even by 17% of the teachers, a horror heard, be it whispered, on the lips of prominent politicians and even presidents of prestigious universities.

| Q.689 | +PSE "Correct" | +PSE "Used" | -PSE "Correct" | -PSE "Used" | TEACHERS "Correct" | TEACHERS "Used"
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>between John and I</td>
<td></td>
<td>between John and me</td>
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<td></td>
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</tr>
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<td>60</td>
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<td>26</td>
<td>24</td>
<td>81</td>
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</tr>
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<td>71</td>
<td>60</td>
<td>17</td>
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</tr>
</tbody>
</table>

This question (Q.689) brought about a complete polarization between the +PSE speakers and the teachers on the one hand (with 60 and 81 respectively for the traditionally correct "between John and me") over against the -PSE score of 71 for "between John and I." But let us not overlook the approximately one-third in each
group who gave the opposite answer. The teachers had by far the highest score here (81 under "Correct" and 72 under "Used"), i.e., almost three-quarters of them actually used the form they recognized as traditionally correct.

The scores for Q. 693 were in general very similar to those just cited for Q. 689 with rather a similar pattern, except that this time we had two pronouns (you and me) instead of one noun and one pronoun (John and me).

<table>
<thead>
<tr>
<th>Q.693</th>
<th>+PSE &quot;Correct&quot;</th>
<th>+PSE &quot;Used&quot;</th>
<th>-PSE &quot;Correct&quot;</th>
<th>-PSE &quot;Used&quot;</th>
<th>TEACHERS &quot;Correct&quot;</th>
<th>TEACHERS &quot;Used&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>between you and me</td>
<td>65</td>
<td>57</td>
<td>38</td>
<td>37</td>
<td>83</td>
<td>72</td>
</tr>
<tr>
<td>between you and I</td>
<td>32</td>
<td>28</td>
<td>60</td>
<td>54</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

When we switched to the subject relationship, however, the "correct" scores and the corresponding use of the correct form were much higher: in the nineties or, with the teachers, 100%. Only 1% or 2% of the whole population opted for "Helen and me are going shopping" (none of the teachers), and only 2% of -PSE favoured "Me and Helen ..." (Q. 697).

<table>
<thead>
<tr>
<th>Q.697</th>
<th>+PSE &quot;Correct&quot;</th>
<th>+PSE &quot;Used&quot;</th>
<th>-PSE &quot;Correct&quot;</th>
<th>-PSE &quot;Used&quot;</th>
<th>TEACHERS &quot;Correct&quot;</th>
<th>TEACHERS &quot;Used&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helen and I</td>
<td>99</td>
<td>95</td>
<td>97</td>
<td>89</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Helen and me</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>me and Helen</td>
<td>--</td>
<td>--</td>
<td>2</td>
<td>2</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

The traditional "to whom" (Q. 785) did not do so well in general as the items studied above, but the theoretically correct "It's I" fared even worse. Not even the teachers made the fifty percent mark here, which simply goes to show that, in this pattern---heedless of traditional grammar-usage has decided in favour of "It's me," perhaps using as a model the French equivalent "C'est moi" (which can never be "C'est je!")
<table>
<thead>
<tr>
<th>Q.717 Q.786 Q.809</th>
<th>+PSE &quot;Correct&quot;</th>
<th>+PSE &quot;Used&quot;</th>
<th>-PSE &quot;Correct&quot;</th>
<th>-PSE &quot;Used&quot;</th>
<th>TEACHERS &quot;Correct&quot;</th>
<th>TEACHERS &quot;Used&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>to Tom and me</td>
<td>67</td>
<td>61</td>
<td>58</td>
<td>52</td>
<td>87</td>
<td>78</td>
</tr>
<tr>
<td>to Tom and I</td>
<td>32</td>
<td>32</td>
<td>41</td>
<td>37</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>to who</td>
<td>60</td>
<td>36</td>
<td>34</td>
<td>22</td>
<td>61</td>
<td>47</td>
</tr>
<tr>
<td>who to</td>
<td>26</td>
<td>26</td>
<td>46</td>
<td>46</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>whom to</td>
<td>8</td>
<td>6</td>
<td>17</td>
<td>13</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>it's me</td>
<td>56</td>
<td>56</td>
<td>76</td>
<td>76</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>it's I</td>
<td>40</td>
<td>14</td>
<td>22</td>
<td>11</td>
<td>45</td>
<td>15</td>
</tr>
</tbody>
</table>

5.1.4 Transitive versus intransitive verb forms

In Q.705, Q.813, and Q.817 the correct choice between forms of *lay* and *lie* involves awareness of the grammatical concept of transitivity. Is a direct object present or possible? The verb is transitive. Is a direct object impossible? The verb is intransitive. For example, "I will *lay my cards* (direct object) on the table," *lay* is transitive; but in "The cards now *lie* (no direct object) on the table," *lie* is intransitive. Apart from this functional difference a further complication arises in the area of morphology:

<table>
<thead>
<tr>
<th></th>
<th>Present Tense</th>
<th>Past Tense</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitive</td>
<td><em>lay</em></td>
<td><em>laid</em></td>
<td>Regular or weak</td>
</tr>
<tr>
<td>Intransitive</td>
<td><em>lie</em></td>
<td><em>lay</em></td>
<td>Irregular or strong</td>
</tr>
<tr>
<td>Intransitive</td>
<td><em>lie</em></td>
<td><em>lied</em></td>
<td>Regular or weak</td>
</tr>
</tbody>
</table>

* tell untruths

As a result of these alternations, the past tense form of the intransitive verb *lie* is *lay* which is identical with the present tense form of transitive verb *lay*. Further, there is a second verb *to lie* meaning "to tell untruths" which is identical in form with *to lie* meaning "to recline," or "to assume a reclining position"! This second verb *to lie* has the regular "weak" past form *lied*.

Although these complexities cause problems for many speakers of English it is clear that in general the +PSE score and that of the teachers (both in the 70-80 range) is
distinctly higher than the -PSE group's, if we check the correct form "he lay in the sun" in Q.705.

<table>
<thead>
<tr>
<th>Q.705</th>
<th>+PSE &quot;Correct&quot;</th>
<th>+PSE &quot;Used&quot;</th>
<th>-PSE &quot;Correct&quot;</th>
<th>-PSE &quot;Used&quot;</th>
<th>TEACHERS &quot;Correct&quot;</th>
<th>TEACHERS &quot;Used&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>he lay in the sun</td>
<td>79</td>
<td>78</td>
<td>60</td>
<td>57</td>
<td>76</td>
<td>74</td>
</tr>
<tr>
<td>he laid in the sun</td>
<td>17</td>
<td>16</td>
<td>34</td>
<td>34</td>
<td>21</td>
<td>18</td>
</tr>
<tr>
<td>he lied in the sun</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

In response to Q.813 the correct form "lie down" has even higher scores--in the eighties--for +PSE and the teachers, and, for the -PSE, in the seventies. Conspicuous in all three categories is the identity or near identity of the scores for "Correct" and "Used" in each case.

<table>
<thead>
<tr>
<th>Q.813</th>
<th>+PSE &quot;Correct&quot;</th>
<th>+PSE &quot;Used&quot;</th>
<th>-PSE &quot;Correct&quot;</th>
<th>-PSE &quot;Used&quot;</th>
<th>TEACHERS &quot;Correct&quot;</th>
<th>TEACHERS &quot;Used&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>lie down</td>
<td>85</td>
<td>85</td>
<td>73</td>
<td>72</td>
<td>87</td>
<td>87</td>
</tr>
<tr>
<td>lay down</td>
<td>15</td>
<td>15</td>
<td>25</td>
<td>24</td>
<td>13</td>
<td>13</td>
</tr>
</tbody>
</table>

In answer to Q.817, the correct past participle "lain" does not fare so well as the forms already studied: the +PSE and the teachers reach the sixties, with the -PSE lagging behind.

<table>
<thead>
<tr>
<th>Q.817</th>
<th>+PSE &quot;Correct&quot;</th>
<th>+PSE &quot;Used&quot;</th>
<th>-PSE &quot;Correct&quot;</th>
<th>-PSE &quot;Used&quot;</th>
<th>TEACHERS &quot;Correct&quot;</th>
<th>TEACHERS &quot;Used&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>it has lain there</td>
<td>60</td>
<td>55</td>
<td>51</td>
<td>49</td>
<td>68</td>
<td>61</td>
</tr>
<tr>
<td>It has laid there</td>
<td>37</td>
<td>35</td>
<td>38</td>
<td>37</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>it has lied there</td>
<td>2</td>
<td>1</td>
<td>10</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
5.1.5 Morphosyntactic choice

Some further questions aimed at verb morphology bring out the distribution of alternate forms such as *sneaked* versus *snuck* (Q.721). Here the traditional *sneaked* is ahead for +PSE (56) and, especially for the teachers (68), although the percentage for "Used" falls behind with 41 and 58 respectively. The -PSE figures show a cross-over as the higher figure ("Correct" 50; "Used" 50) goes to the *snuck* form.

<table>
<thead>
<tr>
<th>Q.721</th>
<th>+PSE &quot;Correct&quot;</th>
<th>-PSE &quot;Correct&quot;</th>
<th>TEACHERS &quot;Correct&quot;</th>
<th>TEACHERS &quot;Used&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>sneaked</td>
<td>56</td>
<td>49</td>
<td>68</td>
<td>58</td>
</tr>
<tr>
<td>snuck</td>
<td>41</td>
<td>50</td>
<td>26</td>
<td>26</td>
</tr>
</tbody>
</table>

For Q.741, the overall figures show the reverse tendency. That is, the traditional form *dived* scores a minority in every case; *dove* is in the fifties for the teachers, in the sixties for +PSE, and in the seventies for -PSE.

<table>
<thead>
<tr>
<th>Q.741</th>
<th>+PSE &quot;Correct&quot;</th>
<th>-PSE &quot;Correct&quot;</th>
<th>TEACHERS &quot;Correct&quot;</th>
<th>TEACHERS &quot;Used&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>dived</td>
<td>25</td>
<td>14</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>dove</td>
<td>67</td>
<td>79</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

In Q.669 and Q.673 we investigated the past tense and past participle forms of the verb *to drink*—traditionally *drank* and *drunk* respectively. In current English usage these forms tend in some situations to become confused: some speakers say *I drank/I have drank*, or *I drunk/I have drunk* instead of the historically correct *I drank/I have drank*.

The overwhelming majority of all informants—teachers: 100; +PSE: 99; -PSE: 98—used the correct past tense: *(he) drank*. For the past participle, however, the correct form—*(he has) drunk*—reached only the seventies with the teachers and the sixties with +PSE. With -PSE *drunk* here dropped to the thirties so we had a cross-over, the majority favouring *(he has) drank,* which scored in the fifties plus range. A few in all groups opted for *drunken*, and—except for teachers—even *dranken*. It has been suggested that the avoidance of the form *drunk* is motivated by a stigma arising from the derived meaning "intoxicated." This stigma has been generalized by the majority of the -PSE group (note that in our question it was a matter of drinking milk!) and by sizable minorities of the other two groups: +PSE in the thirties and the teachers in the twenties.
<table>
<thead>
<tr>
<th></th>
<th>Q.673</th>
<th>Q.679</th>
<th>+PSE &quot;Correct&quot;</th>
<th>+PSE &quot;Used&quot;</th>
<th>-PSE &quot;Correct&quot;</th>
<th>-PSE &quot;Used&quot;</th>
<th>TEACHERS &quot;Correct&quot;</th>
<th>TEACHERS &quot;Used&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>drank</td>
<td>99</td>
<td>99</td>
<td>98</td>
<td>98</td>
<td>100</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>drunk</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>has drunk</td>
<td>63</td>
<td>60</td>
<td>35</td>
<td>33</td>
<td>72</td>
<td>70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>has drunk</td>
<td>31</td>
<td>30</td>
<td>56</td>
<td>54</td>
<td>24</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>has drunken</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>has dranken</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In Q.769 and Q.797, which dealt with the verbs to forget and to prove, the -en form for the past participle was well ahead of the alternate form, in the first case with overall figures in the nineties, and a hundred percent for the teachers. In the second case overall figures, including those for the teachers, were in the seventies.

<table>
<thead>
<tr>
<th></th>
<th>Q.797</th>
<th>Q.769</th>
<th>+PSE &quot;Correct&quot;</th>
<th>+PSE &quot;Used&quot;</th>
<th>-PSE &quot;Correct&quot;</th>
<th>-PSE &quot;Used&quot;</th>
<th>TEACHERS &quot;Correct&quot;</th>
<th>TEACHERS &quot;Used&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>forgotten</td>
<td>97</td>
<td>97</td>
<td>92</td>
<td>91</td>
<td>100</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>forget</td>
<td>2</td>
<td>2</td>
<td>7</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>proved</td>
<td>16</td>
<td>16</td>
<td>19</td>
<td>17</td>
<td>18</td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>proven</td>
<td>75</td>
<td>74</td>
<td>76</td>
<td>73</td>
<td>71</td>
<td>71</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.1.6 Agreement

In the area of singular/plural agreement we had Q.681, Q.733, Q.725, Q.753, and Q.781. The first two of these involved the choice between is or 's (singular) and are or 're (plural). To give a polarized estimate of the results, the are and 're scores, i.e., the plural forms—which were correct—should be added together, giving, for example, 90 under "Correct" for +PSE, 99 for the teachers, and 75 for -PSE in response to Q.681, and so forth, and even higher percentages for Q.733. For the correct third person singular doesn't the percentages reached 100 for both +PSE and teachers in Q.753, and was on the high nineties all around in Q.725. The structures "he don't like ..." (in Q.753) and "he don't bother me" were therefore universally rejected.
<table>
<thead>
<tr>
<th>Q.681</th>
<th>+PSE &quot;Correct&quot;</th>
<th>+PSE &quot;Used&quot;</th>
<th>-PSE &quot;Correct&quot;</th>
<th>-PSE &quot;Used&quot;</th>
<th>TEACHERS &quot;Correct&quot;</th>
<th>TEACHERS &quot;Used&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q.733</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q.725</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q.753</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>there are</td>
<td>74</td>
<td>61</td>
<td>67</td>
<td>51</td>
<td>83</td>
<td>72</td>
</tr>
<tr>
<td>there 're</td>
<td>16</td>
<td>16</td>
<td>8</td>
<td>8</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>there 's</td>
<td>3</td>
<td>3</td>
<td>9</td>
<td>9</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>where are</td>
<td>79</td>
<td>73</td>
<td>62</td>
<td>72</td>
<td>79</td>
<td>79</td>
</tr>
<tr>
<td>where 're</td>
<td>16</td>
<td>16</td>
<td>8</td>
<td>8</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>where 's</td>
<td>3</td>
<td>3</td>
<td>9</td>
<td>9</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>doesn't</td>
<td>99</td>
<td>99</td>
<td>94</td>
<td>94</td>
<td>98</td>
<td>98</td>
</tr>
<tr>
<td>don't</td>
<td>--</td>
<td>--</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>anything</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>nothing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

In Q.781, where the choice was between "these kinds of apples" and "these kind of apples," +PSE and especially the teachers came out heavily in favour of the plural agreement marker -s (this time involving the plural demonstrative adjective these and the following noun kinds). The -PSE once again showed the cross-over effect, opting strongly ("Correct" and "Used" both 77) for "these kind ...."  

<table>
<thead>
<tr>
<th>Q.781</th>
<th>+PSE &quot;Correct&quot;</th>
<th>+PSE &quot;Used&quot;</th>
<th>-PSE &quot;Correct&quot;</th>
<th>-PSE &quot;Used&quot;</th>
<th>TEACHERS &quot;Correct&quot;</th>
<th>TEACHERS &quot;Used&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>these kinds</td>
<td>57</td>
<td>55</td>
<td>22</td>
<td>18</td>
<td>74</td>
<td>72</td>
</tr>
<tr>
<td>these kind</td>
<td>42</td>
<td>42</td>
<td>77</td>
<td>77</td>
<td>23</td>
<td>23</td>
</tr>
</tbody>
</table>

5.1.7 Subjunctive use

Q.749 and Q.793 check on the lone surviving specific form of the English subjunctive mood: were, used not as a plural but as a singular. It weathered well in the pattern "if I were ..." as opposed to "if I was ..." scoring uniformly 95 for both +PSE and -PSE and--again uniformly--87 for the teachers. It was less well represented in the impersonal construction "if it were warmer" with scores mostly in the fifties for +PSE and -PSE, and in the sixties for the teachers.
<table>
<thead>
<tr>
<th>Q.749</th>
<th>+PSE &quot;Correct&quot;</th>
<th>+PSE &quot;Used&quot;</th>
<th>-PSE &quot;Correct&quot;</th>
<th>-PSE &quot;Used&quot;</th>
<th>TEACHERS &quot;Correct&quot;</th>
<th>TEACHERS &quot;Used&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q.793</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If I were</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>97</td>
<td>97</td>
</tr>
<tr>
<td>If I was</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>If it were warmer</td>
<td>58</td>
<td>54</td>
<td>50</td>
<td>47</td>
<td>68</td>
<td>62</td>
</tr>
<tr>
<td>If it was warmer</td>
<td>38</td>
<td>38</td>
<td>49</td>
<td>49</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

### 5.1.8 Pluperfect or conditional

Of more central import to the verb system were the questions Q.745, Q.777, Q.805 and Q.773 which were intended to investigate perceptive forms, especially the pluperfect in conditional clauses with "if ... ". In the latter the traditionally correct pluperfect comes out in the lead, scoring over 50 for +PSE and teachers, with consistency between the "Correct" and the "Used" figures in Q.745 and Q.777, where for the first "if we had seen" and "had we seen" were favoured, and for the second, "if I had gone" and "had I gone." The rather literary or even bookish inversion "had we ..." and "had I ..." were surprisingly popular with the -PSE group.

<table>
<thead>
<tr>
<th>Q.745 Q.777</th>
<th>+PSE &quot;Correct&quot;</th>
<th>+PSE &quot;Used&quot;</th>
<th>-PSE &quot;Correct&quot;</th>
<th>-PSE &quot;Used&quot;</th>
<th>TEACHERS &quot;Correct&quot;</th>
<th>TEACHERS &quot;Used&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q.805 Q.773</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(If we) had seen</td>
<td>59</td>
<td>56</td>
<td>46</td>
<td>45</td>
<td>84</td>
<td>58</td>
</tr>
<tr>
<td>had we seen</td>
<td>14</td>
<td>7</td>
<td>15</td>
<td>10</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>BOTH</td>
<td>12</td>
<td>7</td>
<td>9</td>
<td>7</td>
<td>20</td>
<td>11</td>
</tr>
<tr>
<td>...would have seen</td>
<td>3</td>
<td>2</td>
<td>11</td>
<td>9</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>...had of seen</td>
<td>4</td>
<td>3</td>
<td>7</td>
<td>7</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>...hadda seen</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>...saw</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>If I had gone</td>
<td>55</td>
<td>52</td>
<td>45</td>
<td>43</td>
<td>58</td>
<td>58</td>
</tr>
<tr>
<td>had I gone</td>
<td>9</td>
<td>5</td>
<td>17</td>
<td>12</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>BOTH</td>
<td>23</td>
<td>10</td>
<td>9</td>
<td>1</td>
<td>25</td>
<td>1</td>
</tr>
<tr>
<td>had of gone</td>
<td>2</td>
<td>2</td>
<td>9</td>
<td>9</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>hadda gone</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>would have gone</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>would of gone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>went</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>had of went</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>after we had eaten</td>
<td>64</td>
<td>55</td>
<td>70</td>
<td>60</td>
<td>68</td>
<td>61</td>
</tr>
<tr>
<td>after we had ate</td>
<td>28</td>
<td>28</td>
<td>27</td>
<td>25</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>you should have seen</td>
<td>95</td>
<td>90</td>
<td>88</td>
<td>81</td>
<td>97</td>
<td>3</td>
</tr>
<tr>
<td>you should of seen</td>
<td>4</td>
<td>4</td>
<td>12</td>
<td>12</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>you shoudla seen</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

With the very detailed comprehensive data we have derived from these responses we have enough information to settle satisfactorily a long-standing controversy over the origin and interpretation of the frequently observed non-standard colloquialism "if I/we hadda known/seen ..." etc. The mysterious added vowel following had has evoked many explanations, including one which derived it from a weakened form of the Old English past participle prefix ge- (compare Modern German ge- with the same function). This hypothesis I could never accept, as it was in conflict with what I know about the history of English dialects. A very acceptable explanation arises, however, if we place in a particular order, some of the variable forms we found through SVEN:

(a) if we would have seen ... (the starting point)
(b) if we would of seen ... (of here stands phonetically for 'ave, short for have)
(c) if we had of seen ...  
(d) if we hadda seen ... (-a is a further shortening for of or 'ave)

Then reconstructing the evolutionary background of "hadda" we come up with this likely sequence:

(i) if we would have seen (still the starting point)
(ii) if we'd have seen (would shortened to 'd)
(iii) if we'd 'a' seen ('ave shortened to 'a')
(iv) if we had 'a' seen ('d wrongly restressed as had instead of would)

The simple solution is that--mistakenly--the short form 'd has been restored, not to the original would but to had, and the following have in its weakened form "a" is no longer recognizable (otherwise no one would come up with the impossible sequence "if we had have seen ..."). The use of had, of course, reflects the simpler original pluperfect structure "if we had seen ...

Q.733 provides additional evidence in support of the hypothesis proposed above, in that here we see non-standard forms "you should of seen" and "you shoudla seen"
substituting for the standard "you should have seen."

In connection with the pluperfect proper—without the complications of conditional clauses—Q.805 makes it clear that for a sizable minority of speakers it is eschewed altogether and the simple past takes its place: "after we ate" (simple past) rather than "after we had eaten" (pluperfect). This matter was investigated in SVEN largely as the result of an observation of Howard Woods who carried out the Ottawa Survey parallel to SVEN. He maintained that many non-standard speakers avoided entirely the use of the pluperfect, especially in the U.S. It would now seem that this avoidance is also definitely a feature of Canadian non-standard speech as well.

There are various possible explanations for this phenomenon: it may reflect what the British sociologist, Basil Bernstein, calls the "restricted code" type of language with a simplified grammar and vocabulary, used by non-standard speakers generally, although many critics reject Bernstein's claim.

Another possible factor might be the direct or indirect influence of immigrants' speech in which their English is affected by the structure of their own mother tongue. Notably, outside the range of western European languages, forms parallel to the pluperfect are missing. In particular, none of the Slavic languages has anything corresponding to the pluperfect, which therefore constitutes a serious stumbling block for their speakers who wish to learn English. In any case, it is noteworthy that from 20 to 30% in all categories choose—as "Correct" and "Used"—"after we ate" instead of "after we had eaten."

5.1.9 Miscellany

Some miscellaneous items round off our grammatical investigations. The form of enquiry "do you have?" topped the scoring list for +PSE and teachers over the second runner "have you?" (Q.657). For -PSE there was a cross-over here. This time, be it noted, the teachers' score (39) fell behind the +PSE (45). The structure "have you got?" had much lower frequency.

<table>
<thead>
<tr>
<th>Q.657</th>
<th>+PSE &quot;Correct&quot;</th>
<th>+PSE &quot;Used&quot;</th>
<th>-PSE &quot;Correct&quot;</th>
<th>-PSE &quot;Used&quot;</th>
<th>TEACHERS &quot;Correct&quot;</th>
<th>TEACHERS &quot;Used&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>have you?</td>
<td>32</td>
<td>23</td>
<td>36</td>
<td>31</td>
<td>35</td>
<td>28</td>
</tr>
<tr>
<td>do you have?</td>
<td>45</td>
<td>29</td>
<td>32</td>
<td>26</td>
<td>39</td>
<td>28</td>
</tr>
<tr>
<td>have you got?</td>
<td>16</td>
<td>9</td>
<td>24</td>
<td>23</td>
<td>17</td>
<td>13</td>
</tr>
</tbody>
</table>

In Q.701, the historically impossible, in Canada, at least, and otherwise improbable tag question form "aren't I?" had top place (especially for the -PSE group) over its
reasonable equivalent "am I not?" and its questionable non-standard (at least in Canada) substitute "ain't I?"

<table>
<thead>
<tr>
<th>Q.701</th>
<th>+PSE &quot;Correct&quot;</th>
<th>+PSE &quot;Used&quot;</th>
<th>-PSE &quot;Correct&quot;</th>
<th>-PSE &quot;Used&quot;</th>
<th>TEACHERS &quot;Correct&quot;</th>
<th>TEACHERS &quot;Used&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>aren't I</td>
<td>63</td>
<td>61</td>
<td>73</td>
<td>72</td>
<td>67</td>
<td>53</td>
</tr>
<tr>
<td>am I not?</td>
<td>33</td>
<td>18</td>
<td>22</td>
<td>11</td>
<td>38</td>
<td>21</td>
</tr>
<tr>
<td>ain't I?</td>
<td>--</td>
<td>--</td>
<td>1</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

In Q.757, the first person plural imperative negative formula "let's not ..." scored in the middle and high nineties over against its alternative "don't let's."

<table>
<thead>
<tr>
<th>Q.757</th>
<th>+PSE &quot;Correct&quot;</th>
<th>+PSE &quot;Used&quot;</th>
<th>-PSE &quot;Correct&quot;</th>
<th>-PSE &quot;Used&quot;</th>
<th>TEACHERS &quot;Correct&quot;</th>
<th>TEACHERS &quot;Used&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>let's not</td>
<td>96</td>
<td>95</td>
<td>98</td>
<td>97</td>
<td>95</td>
<td>95</td>
</tr>
<tr>
<td>don't let's</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

In Q.765, the negative form of the past tense habitual verb construction "used to" gives rise to various patterns. Among those investigated, "never used to" (as in "we never used to go there") took the lead with all groups, although this time the strongest support came from -PSE ("Correct": 84; "Used": 82), followed by +PSE (70/68), with the teachers third in line (67/64). The order in favour of "didn't use to" was—first the teachers (17/17), second +PSE (15/15), and third -PSE (11/10). The same ordering applies to "used not to:" teachers (8/8); +PSE (7/4); -PSE (1/1).

<table>
<thead>
<tr>
<th>Q.765</th>
<th>+PSE &quot;Correct&quot;</th>
<th>+PSE &quot;Used&quot;</th>
<th>-PSE &quot;Correct&quot;</th>
<th>-PSE &quot;Used&quot;</th>
<th>TEACHERS &quot;Correct&quot;</th>
<th>TEACHERS &quot;Used&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>never used to</td>
<td>70</td>
<td>68</td>
<td>84</td>
<td>82</td>
<td>67</td>
<td>64</td>
</tr>
<tr>
<td>didn't use to</td>
<td>15</td>
<td>15</td>
<td>11</td>
<td>10</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>used not to</td>
<td>7</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>
In Q.713, we examined the usage with *less* and *fewer*. Traditionally, *fewer* must be used with so-called "countable" nouns: *fewer knives, forks, plates, etc., while *less* is restricted to "mass" or "non-count" nouns: *less salt, sugar, etc.* Our question referred to the "countable" noun *people*, yet many speakers used *less* instead of the correct *fewer*. Still, over 90% of teachers judged *fewer"Correct"* although only 79% claimed they actually used that form. Of the +PSE group 83% judged *fewer"Correct"* and 72% used it. For -PSE the figures were still lower: *Correct:" 64 and "Used," 59.

<table>
<thead>
<tr>
<th>Q.713</th>
<th>+PSE &quot;Correct&quot;</th>
<th>+PSE &quot;Used&quot;</th>
<th>-PSE &quot;Correct&quot;</th>
<th>-PSE &quot;Used&quot;</th>
<th>TEACHERS &quot;Correct&quot;</th>
<th>TEACHERS &quot;Used&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>fewer</td>
<td>d3</td>
<td>72</td>
<td>64</td>
<td>58</td>
<td>92</td>
<td>79</td>
</tr>
<tr>
<td>less</td>
<td>15</td>
<td>15</td>
<td>33</td>
<td>33</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

In Q.737 and Q.753, the possibility of double negatives (not plus no, or not plus nothing) was rejected 100% by all groups.

<table>
<thead>
<tr>
<th>Q.737 Q.753</th>
<th>+PSE &quot;Correct&quot;</th>
<th>+PSE &quot;Used&quot;</th>
<th>-PSE &quot;Correct&quot;</th>
<th>-PSE &quot;Used&quot;</th>
<th>TEACHERS &quot;Correct&quot;</th>
<th>TEACHERS &quot;Used&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>any (vs. no)</td>
<td>100</td>
<td>100</td>
<td>99</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>anything</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>nothing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

In Q.761, the deviant form "anyways" instead of "anyway" was actually used by 14% of -PSE and 3% of +PSE, but was totally rejected by teachers.

<table>
<thead>
<tr>
<th>Q.761</th>
<th>+PSE &quot;Correct&quot;</th>
<th>+PSE &quot;Used&quot;</th>
<th>-PSE &quot;Correct&quot;</th>
<th>-PSE &quot;Used&quot;</th>
<th>TEACHERS &quot;Correct&quot;</th>
<th>TEACHERS &quot;Used&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>anyway</td>
<td>5</td>
<td>3</td>
<td>15</td>
<td>14</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>anyways</td>
<td>5</td>
<td>3</td>
<td>15</td>
<td>14</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

In Q.729, the adjective form "real" in place of the adverb "really" (modifying an adjective in our example: "a real nice lady") was favoured and used by small minorities—well under 20%—of +PSE and teachers. The -PSE group split evenly with 42% claiming they used *really* and another 42% claiming they used *real*. See also the figures for non-standard past participles for *bought, brought* and *see* and for *loan* as a verb.
5.2 Stigmatized features: GOT vs. GOTTEN and EH?

In addition to the grammatical points just described, we decided to investigate two further features which tend to be somewhat controversial in that, while they are accepted and used by some Canadians, they are strongly stigmatized and rejected by the overwhelming majority.

The two features in question involve the choice between GOT and GOTTEN for the past participle of the verb "to get," and the use of the interrogative particle EH? in place of a tag question in sentence-final position. This particle is often cited by Americans as an unmistakable marker of Canadian English speech and has received a great deal of publicity recently in the media, particularly through the comedic sketches of the fictional Mackenzie Brothers on Second City Television.

The questions covering these two items range from Q.833 to Q.841 (for GOT/GOTTEN) and from Q.825 to Q.832A (for EH?).

5.2.1 GOT/GOTTEN

The choice of GOT or GOTTEN will be dealt with first. With the verb "to forget" the modern standard form of the past participle is always "forgotten" (as in "I have forgotten") while the use of "forgot" in such phrases (i.e., "I have forgot") is considered archaic, dialectal, or non-standard. The reverse, however, is the case with the verb "to get" -- "I have got" is now considered standard usage by most speakers (it is the
only acceptable form in British usage), while "I have gotten" is felt to be non-standard by many.

A look at the general figures shows how our Canadian informants reacted to this question of usage. For all of the nine questions involved here only 37% of the speakers said they would use the form GOTTEN, while 63% rejected GOTTEN altogether, including six individuals who claimed that, although they used the word, they still rejected it.

We suspected, of course, that the acceptance or rejection would vary to some extent with different individual sentence patterns, and this proved to be the case. The percentage scores for the nine different structures are arranged in order below, with the highest rejection rate coming first. (Note: "No" means rejection, and "Yes" means acceptance).

Q.836 She was supposed to have gotten there at 3  
   No: 78  Yes: 22

Q.840 Have you gotten an answer ...?  
   No: 73  Yes: 27

Q.841 She's finally gotten to try it  
   No: 71  Yes: 29

Q.838 If I hadn't gotten my feet braced in time ...  
   No: 66  Yes: 34

Q.837 He had just gotten the refrigerator working (fixed)...  
   No: 62  Yes: 38

Q.835 You might have gotten killed  
   No: 59  Yes: 41

Q.834 It has gotten cooler  
   No: 55  Yes: 45

Q.839 You should have gotten up earlier  
   No: 52  Yes: 48

Q.833 I haven't gotten over my cold yet  
   No: 50  Yes: 50

The variation in acceptability and rejection within this set of sentences would suggest that semantic differences might play some role, the meanings of "get" ranging from "arrive" (Q.836), through "receive" (Q.840), "succeed" (Q.841), to "be"--passive voice
auxiliary—(Q.835), and "become" (Q.834). The highest rates of acceptance occur when "get" is part of a verbal idiom: "get up" meaning "rise;" and "get over" meaning "recover from."

Further interesting information is brought to light when we break down the general statistics by the three sociological factors, of age, sex, and socio-economic status. We have this breakdown for each of the nine questions separately and also for the incidence of GOTTEN and GOT in the whole set of nine questions collectively.

Bearing in mind the overall mean of 37% for the choice of GOTTEN in the whole population, the collective set of statistics is most revealing of trends and tendencies in the use of these competing forms. Thus, in the young age group, GOTTEN was favoured 54% of the time as compared with 39% in the middle and only 19% in the old group—a clear stratification showing marked increase from old to young.

A similar increased use is shown by the socio-economic breakdown where the 32% scored in the top status group IV rises to 36% in group III, 37% in group II, and 45% in the lowest status group I.

The sex breakdown shows the higher figure—39%—in the female group and 35% for the males, while cross-tabulation of age with sex shows that this load among the female speakers is limited to the young females, thus:

**AGE/SEX**

<table>
<thead>
<tr>
<th>YM</th>
<th>MM</th>
<th>OM</th>
</tr>
</thead>
<tbody>
<tr>
<td>43</td>
<td>42</td>
<td>21</td>
</tr>
<tr>
<td>YF</td>
<td>MF</td>
<td>OF</td>
</tr>
<tr>
<td>63</td>
<td>36</td>
<td>17</td>
</tr>
</tbody>
</table>

We conclude that a marked increase in the use of GOTTEN is taking place in the young female group. The socio-economic factor does not show any marked correlation with the use of GOT/GOTTEN.

The factor of education was checked out by means of a special printout which split the whole population of SVEN into those with and those without post-secondary education (i.e., +PSE and -PSE). This distinction divides the whole group not quite in half: 46% have post-secondary education and 54% have not. As for the choice of GOTTEN rather than GOT, the former is favoured by fewer among the +PSE group (34%) than the -PSE group (40%).

Finally we extracted the figures for the subgroup of 47 teachers which we can compare with the +PSE and -PSE groups just described. A detailed breakdown is shown below for the teachers' choice of GOTTEN in each of the nine questions ordered so that the highest rejection percentage rate comes first:
<table>
<thead>
<tr>
<th></th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q.840</td>
<td>82</td>
<td>18</td>
</tr>
<tr>
<td>Q.841</td>
<td>81</td>
<td>19</td>
</tr>
<tr>
<td>Q.836</td>
<td>79</td>
<td>21</td>
</tr>
<tr>
<td>Q.838</td>
<td>79</td>
<td>21</td>
</tr>
<tr>
<td>Q.834</td>
<td>77</td>
<td>23</td>
</tr>
<tr>
<td>Q.835</td>
<td>77</td>
<td>23</td>
</tr>
<tr>
<td>Q.837</td>
<td>73</td>
<td>27</td>
</tr>
<tr>
<td>Q.833</td>
<td>66</td>
<td>34</td>
</tr>
<tr>
<td>Q.839</td>
<td>66</td>
<td>34</td>
</tr>
</tbody>
</table>

The teachers' rejection percentages for GOTTEN are well above those for the total population ranging from 82% down to 66% as against the general figures of 78% down to 50%. The ordering is somewhat different, although for both, Q.840 and Q.841 come high on the rejection list while Q.833 and Q.839 are at the bottom. It will also be noted that the teachers' acceptance of GOTTEN ranges from 18% to 34%—much lower, therefore, than the +PSE average of 34% and, of course, lower still than the -PSE average of 40%.

The conclusion must be then that education as a factor is closely related to this usage problem, the group with the higher education level rejecting GOTTEN more frequently than the others, and the teachers' group showing the highest rejection rate of all.

5.2.2 EH?

While the form GOTTEN aroused hostility and rejection in almost two-thirds of our population, the use of EH? as an interrogative particle provoked an even more violent reaction. This supposedly typical marker distinguishing Canadian speakers from American was rejected by almost three-quarters of our representative selection of urban-dwelling Canadians: in response to nine utterances involving EH? 73% of our total population rejected the sentences and only 27% accepted them.

Popular comment tends to view this so-called Canadian marker as a single undifferentiated appendage to any statement. The whole subject, however, has been carefully researched from a linguistic point of view. There are some seven different syntactic functions for EH? (Gibson 1976, 1977). We framed utterances to illustrate all of these functions and added two more new examples when we composed the nine sentences Q.825 through Q.832A in the questionnaire.

As with GOT/GOTTEN we found that rejection or acceptance varied, this time with the different syntactic values of EH? In the tabulation below, the scores are ordered with the highest rejection rate listed first. (As before "No" signifies rejection, "Yes" acceptance).
Q.832A  Thanks, eh?
    No: 81  Yes: 9

Q.831  This girl is up on the 27th floor, eh? then she gets out on the ledge, eh? ...
    No: 88  Yes: 13

Q.832  Eh? What did you say?
    No: 87  Yes: 13

Q.830  What are they trying to do, eh?
    No: 85  Yes: 15

Q.826  It goes over here, eh?
    No: 71  Yes: 29

Q.828  Think about it, eh?
    No: 66  Yes: 34

Q.825  Nice day, eh?
    No: 61  Yes: 39

Q.827  Oh, you're still here, eh?
    No: 55  Yes: 45

Q.829  What a game, eh?
    No: 55  Yes: 45

Overall average—No: 73  Yes: 27

It is clear that EH? is not invariably just a question particle: it sometimes anticipates (Q.832) or repeats (Q.830) a question, or transforms a statement (Q.826), a command (Q.828) a verbless utterance (Q.825), or an exclamation (Q.829) into a question. It may even serve simply to punctuate a narrative (Q.831) as if to say, "Are you still listening to me?" EH? may also emphasize a single-word idiomatic expression (Q.832A) or a verbal instruction (Q.826).

In the computer printouts showing the breakdowns by age, sex, and socio-economic class we can study the figures for each of the nine questions separately or the results for the whole set of questions considered together. We can then make our comparisons and judgements, remembering the overall average figures for the whole population.

In the young age group EH? was accepted 26% of the time, compared with 29% in the middle and 25% in the old group, which shows a slight increase from the latter to the two younger groups.

As far as sex is concerned, the acceptance rate was 32% for the males, a sizable
lead over the females with 22%. Among the socio-economic classes there is no clear stratification: Class I has 28%, II has 24%, III, 28%, and IV, 27%.

We must conclude from these figures that—in contrast with the situation for GOT/GOTTEN—there is only a slight tendency for EH? to become more acceptable to younger speakers as compared with the old, and—once again in contrast—the males this time show a higher acceptance rate than the females. The socio-economic groupings show no marked trend towards either increase or decrease of acceptance. In fact, when we consider the whole business of variability, it would seem that the most important factor for EH? is the shift in acceptability or rejection that correlates with the stylistic changes in the syntactic pattern of the sentences themselves, a shift ranging from a rejection rate of 65% (Q.827 and Q.829) up to 91% (Q.832A).

For EH? the factor of education has a less pronounced polarization effect than it has for GOT/GOTTEN. The +PSE group includes 26% who accept EH? compared to the -PSE’s 28%.

A detailed breakdown of the teachers’ responses to the questions involving EH? is given in the following tabulation which is ordered to show the highest rejection rate at the top of the list:

<table>
<thead>
<tr>
<th></th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q.832A</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Q.830</td>
<td>90</td>
<td>10</td>
</tr>
<tr>
<td>Q.831</td>
<td>90</td>
<td>10</td>
</tr>
<tr>
<td>Q.832</td>
<td>85</td>
<td>15</td>
</tr>
<tr>
<td>Q.826</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>Q.828</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>Q.829</td>
<td>52</td>
<td>48</td>
</tr>
<tr>
<td>Q.827</td>
<td>51</td>
<td>49</td>
</tr>
<tr>
<td>Q.825</td>
<td>49</td>
<td>51</td>
</tr>
</tbody>
</table>

In comparison to the figures for total population the teachers’ rejection percentages for EH? range higher—up to 100% for Q.832A—but they also drop lower—down to 49% for Q.825. The teachers’ average (71%) for rejection of EH? is higher than the general average of 66%. The teachers, however, agree with the total population in putting Q.832A at the top of the rejection list, closely followed by Q.830, Q.831 and Q.832 and in placing Q.825, Q.827 and Q.829 at the bottom with minor fluctuations in the ordering.

As compared with GOT/GOTTEN, therefore, we conclude that the factor of education shows less correlation with the usage relating to EH? And the polarization is less marked in the +PSE/-PSE split, with a rejection rate of 74% in the former group compared with 72% in the latter. This time also the teachers’ average percentage for rejection (71%) is actually slightly lower than that of both the +PSE and the -PSE group.
The most significant feature seems to be the range of responses to the different stylistic patterns of the EH? sentences, the teachers' rejections rising to 100% from 45%, with those of the general population rising to 82% from 66%.

6. SUBJECTIVE ATTITUDES AND LANGUAGE AWARENESS

The penultimate section of the questionnaire, section XI, was designed to find out what informants thought about their own speech, that of their fellow citizens and fellow Canadians, as well as about other regional varieties of English, such as American and British. The responses were analysed in terms of percentages, which are commented on below.

Q.1042A.
This item was added to the questionnaire in order to discover if our SVEN population had any perception of subregional speech differences between the various suburbs and the city of Vancouver itself. Some 78% were not aware of any such differences. The rest said there were differences in some of the neighbouring suburbs and municipalities, for example in White Rock and South Surrey, where they observed American influence (6%); in Port Moody and Coquitlam, at the eastern perimeter (6%); in Delta, south of the Fraser River (4%); in Cloverdale, to the south, near the U.S. border (3%); and in Burnaby, immediately east of Vancouver proper (1%).

Q.1042B
Regarding speech differences between Vancouver and Victoria, on Vancouver Island, 50% said they were unaware of any, and 13% were not sure. Some 32% answered with a straight, unqualified "yes," while 2% said "yes, formerly," and 2% thought only the older Victoria residents, especially those belonging to English-born colonial families, spoke differently.

As far as specific differences were concerned between Vancouver and Victoria, the largest group (84%) singled out the influence of the speech of England on the city of Victoria; 4% said Victoria speakers were "more careful," another 4% said "slower," and 3% said they used "less slang," contrasting the 1% who said "more slang." Another 1% thought Victoria had "longer vowels," but the same number said Vancouver used a "slow drawl." A further 2% said Victoria speakers' grammar was better.

Q.1043
To the question, "Can you identify where other English-speaking Canadians are from by their speech?" some 33% answered "no." There were almost 90 different elaborations of "yes" answers. Most specific responses were given by only one informant, many by two, or three. The largest group (7%) said "Yes - Vancouver." The next largest group (5%) said "Yes - the Prairies," and 4% said "Yes - eastern Canada," while 3% said "Toronto." A smaller number picked Newfoundland (2%) and the Maritimes (1%). Some few mentioned certain provinces (Ontario, Saskatchewan, Alberta) or cities (Winnipeg, Montreal, Calgary). Others associated special features
with regions, for example, placing eh? in Alberta, the Prairies, Ontario, or eastern Canada; a nasal "twang" in Toronto and the Prairies; palm pronounced as /pæm/ in the Prairies and caim as /kæm/ in Ontario; and aunt pronounced /aʊnt/ in Nova Scotia. Vocabulary differences were cited for the Prairies, Toronto and the Maritimes.

Q.1044
Over 90% said they could recognize Americans by their speech. Only 9% said they couldn't.

Q.1044A
While 57% claimed they could identify a speaker from Washington State, 43% said they could not do so.

Q.1044B
This question dealt with the way in which an American speaker could be recognized. The largest group (45%) simply said by his pronunciation or accent. Next came 28% who talked of the Americans' "drawling" or "lazy" speech, and 14% who referred to their "nasal twang."

Q.1044C
Here we asked for specific differences observed in American speakers, and 67% could not come up with any. Among the rest, 12% picked on the American pronunciation of roof and root with a short vowel, as in foot ([ʊ]), rather than the long one /aʊf/ most Canadians use (as in boot); 10% had noticed the American diphthong in house and out and another 3% cited the word route as an example of the same sound, different from the typical Canadian version, which rhymes with boot. A further 9% were aware of both these American differences. A few recalled the American way of saying ration (to rhyme with nation, rather than fashion—the usual Canadian pronunciation).

Further examples included the American diphthong in right rail (4%) different from the Canadian version (see Canadian diphthongs on page 40); the extra /ɪ/ in wash /wɔʃ/ and Washington /wɔʃən/ (5%); the word vase pronounced /veɪs/ (1%), and a few other less frequent items such as tremendous with /ɪ/ missing; get it sounding like /gɪt/; mature like /mɑːtər/; and garage like /ɡɑːrdʒ/.

Some 9% mentioned the letter Z pronounced /sʒ/ as an American feature; also a few mentioned /flaʊnt/ for lieutenant; /lɛmət/ for semi; /boʊn/ for been; /krid/ for creek; and erroneously, of course—/aljəˈmɛniəl/ for aluminum and /ˈmɪsətl/ for missile. A few thought lever (rhyming with never) was American; also /mæn/ for mom; /bjuː/ for buoy; /ˈtwentɪ/ and /ˈdentɪst/ for twenty and dentist; and /datsən/ for Datsun.

Q.1044C
Regarding American lexical differences, some 87% had nothing to report on special features of American vocabulary, but 4% mentioned back in place of Canadian bag (of groceries, etc.); sofa and couch (3%) or davenport (3%)—never the Canadian term chesterfield (2%); never the Canadian eh? (2%) but rather huh? (2%); uh huh or you
bet instead of Canadian you're welcome (in response to thanks); the use of ain't; vacation (for holiday); napkin (for Canadian serviette), 4%; interstate (for highway); faucet (for tap).

Q. 1045
Can Americans identify you as non-American? For 15% the answer to this question was: "I don't know." Of those who said "yes," 20% stated that Americans recognized a Canadian pronunciation or accent: clipped; not drawling; slower diction; crisper, more precise; clearer enunciation; not slurred; softer; no twang. The Canadian use of the interrogative particle eh? was mentioned by 22%, a total of 24% picked the Canadian pronunciation of specific words. Very often a mirror image of examples cited above was mentioned: for example, roof with a long vowel like the oo in tooth (7%); route with the same long oo, rather than the American ou as in out; lieutenant with [lɪf-] rather than [lju]- for the first syllable; the letter Z as /z/ (3%); vase as /væz/, not /vɛɪz/; creek as /krikl/, not /krikl/; mum as /mʌm/, not /məm/. Some thought vocabulary was distinctive, specifying items like chesterfield (3%), serviette (2%), holidays and bloody (as a swearword).

Q. 1045B
Only 5% admitted to modifying their pronunciation when with Americans or when visiting the U.S.; less than 0.5% denied such modification. The 95% majority had no comment here.

Q. 1046
When asked if they had changed their own pronunciation of any words over the years, 31% said "no;" 2% did not know; and 13% said "yes" but gave no examples. The rest who said "yes" gave examples of words they had changed: vase (9%), tomato (4%), schedule (3%), Newfoundland (2%), garage, apricot, khaki, again, sherbet, either, neither, z, lieutenant, missile, theatre, picture, wash, advertisement, been, mobile, semi, leisure, our, during, lever, caramel, often, whether, arctic.

Q. 1046A
What were the reasons for changing pronunciation? Among those who responded, the largest groups gave the following reasons: 19% switched pronunciations by imitation of other speakers; 31% were trying to improve their speech, or to be correct; 15% were changing from their parents' pronunciation; 12% said they wanted to match common Canadian usage; another 12% quoted the influence of parents, spouses, relatives, or friends. Mentioned less frequently were the following reasons: the influence of spelling or reading, (3%); teachers' influence (3%); TV and radio (2%).

7. CASUAL SPEECH

Examples of informal speech are to be found throughout the survey—in discussions with the interviewer about the family background, about subjective attitudes to language, about Vancouver as a place to live, and in casual conversational exchanges in general. One whole section, however, section VIII, was specially
designed to evoke each informant's most casual speech style in spontaneous narrative. The recorded "stories" have all been transcribed, both in normal orthography and in the International Phonetic Alphabet (IPA)—the latter indicating all the nuances of spoken language. The next stage of analysis, an extremely complex coding process, using the special Oxford Concordance Program, is not yet completed. Our research assistant, Erika Hasebe-Lucif, has been working on this aspect of the survey from the beginning and has presented papers on this topic at national and international conferences. She has furnished the following summary of her work on this topic:

In section VIII of the questionnaire, entitled "Spontaneous Narrative," the most informal speech style the interview was elicited. In order to get speakers to respond on a communication level that closely resembles an everyday informal speech situation, informants were encouraged to talk at length about a number of topics, such as winning a lottery, going on a memorable holiday, etc., with a minimum of prompting from the interviewer. Chronologically placed towards the end of the one-and-a-half hour interview, this section did produce excellent samples of the most informal speech style. The technique for handling the "Spontaneous Narrative" material consisted in a complete word-by-word phonetic and orthographic transcription of all the speech sequences that occurred during this part of the interview. Markings were developed to indicate interviewer's comments and questions, interruptions, and features such as stress. This allowed for the analysis of a speech sequence within its conversational and situational environment.

In computerizing, the transcribed spontaneous speech passages, innovative methods had to be used in order to extract the linguistically relevant and crucial variables from the textual sequences. In consultation with computer experts from the Arts Computing Centre of the University of British Columbia, we decided to make use of the Oxford Concordance Program, which provided us not only with printouts of the complete coded texts in orthographic script, but also with tabulated lists of the extracted phonological, syntactic and lexical variables for the individual informants. The items chosen for special analysis were mainly those that also occur in the other more structured parts of the questionnaire, such as in the "Minimal Contrasts," the "Word List" and the "Visual Aural Prompting" sections, where non-continuous speech styles were elicited. Once initial word tabulations have been printed out, the extracted variables are coded in order to establish frequency tables parallel to the ones from the more formal speech styles. This allows SPSS-X cross-comparisons between the spontaneous speech data and the non-continuous, controlled speech registers chosen for special analysis on the basis of age, sex and socio-economic group.

The processed data points towards a considerable difference in formality between these styles. In fact, the results from the "Spontaneous Narrative" section to some degree contradict those from the investigation of controlled speech styles. One example on the syntactic level is the phrase "between you
and me/I." In uncontrolled, unreflected speech, I is used in the sentence type, "...is sitting between you and me/I." In contrast, in the formal syntactic questioning, informants show an awareness that I is grammatically wrong and, therefore, insist that they use me in their normal, everyday speech. (See page 85, Q.693.) Also, there is a noticeable tendency among speakers of the lower socio-economic groups to use real (instead of really) in the adverbial function in their spontaneous speech. (See page 96, Q.729.) For further discussion of the SVEN Casual Speech data, see Erika Hasebe-Ludt, "Spontaneous Speech in the Survey of Vancouver English," in this collection.

8. SUMMARY AND CONCLUSIONS

The function of this penultimate section of Part One is to summarize what our survey has accomplished and to present some conclusions.

Looking back to the introduction where our tasks were outlined (pages 3-4), we could reasonably claim to have successfully achieved our goals as set out there:

1. We have a well-trained, experienced, and resourceful research team.

2. We have a comprehensive, versatile, and innovative questionnaire.

3. We have a set of recordings made during interviews with a representative sample of 300 urban Canadian English speakers.

4. We have computerized the mass of detailed information transcribed from our recordings, and these data are housed in the University of British Columbia Computer Centre, along with the data from Woods' Ottawa Survey.

5. We have worked from copious computer printouts on an analysis of our SVEN data, and short illustrative examples of such analyses have been incorporated in the different sections of this report.

On the pragmatic level certain parallel advantages have accrued:

1. Our trained team members are now qualified to conduct research in this area on their own, studying particular problems in depth or helping with surveys in other parts of Canada.

2. Our elaborately constructed questionnaire and my report to SSHRC (1984) have served as a model for Miklòs Kontra's Budapest Sociolinguistic Interview (pilot version 1988).

3. Our recordings have been copied onto reel-to-reel tapes for archival purposes, so that other linguists can have access to them for particular projects. For example, two linguists from the University of Victoria have already sought permission to use our tapes for research on Canadian English intonation patterns and also on Vancouver
voice quality (see Esling, this volume), two areas of study which have been so far completely unexplored.

4. Our University of British Columbia Computer Centre’s Data Library is storing all our computerized materials, along with the necessary accompanying documentation, and will make them available (under proper supervision) to interested scholars.

5. Our University of British Columbia Main Library has now archived the reel-to-reel master tapes as well as all SVEN documents (other than those required by the Computer Centre Data Library) so that they will be accessible to linguistic researchers.

Interest in SVEN has been expressed by Public Archives Canada (Machine Readable Archives) and other agencies, e.g., the Faculty of Social Science (University of Western Ontario), the Strathy Language Unit (Queen’s University, Kingston), the Public Service Commission of Canada, Language Training Branch—English Development Service (whose Head, Howard Woods, carried out the Survey of Ottawa English), and the Center for Applied Linguistics (Washington, D.C.).

In the realm of linguistic theory, in general, as well as in specific relation to dialectology, our project has many contributions to make. These theoretical contributions are elaborated below.

To begin with, the SVEN informants—selected from Greater Vancouver’s population of over a million and a quarter—had to be a random sample, and yet one controlled by specific limitations as to acceptability. We naturally chose equal numbers of males and females. Less immediately obvious was our decision to use three age groups and four socio-economic categories (with equal numbers in each). We structured our informant sample in this way so that we could check for possible graded transitions between the old and the young, or between classes I, II, III and IV, and observe any marked polarization between the extreme groups.

This arrangement facilitated the study of a number of matters that currently concern linguists:

1. differences between male and female speech
2. observable historical changes in language across three generations
3. the identification of class differences in usage (linked with levels of education), which establish certain linguistic forms as “prestigious” or “stigmatized.”

In relation to these three concerns we must emphasize again that the most important aspect of all our work is our unwavering focus on quantification. Statistical considerations underlined the planning of the questionnaire and dominated the selection of informants. Enough examples of all types of linguistic information had to be elicited from the speakers in all of the 24 cells constituting the SVEN population so
that, when all the data were broken down by the three sociological factors of sex, age, and status, our resulting figures would be statistically significant.

This is where our survey adds a new, scientific dimension to the study of language and sex, as well as historical linguistics, language in society, and dialectology in general. Many of the older studies are based on figures derived from small, unrepresentative, non-randomly selected populations so that their results are not statistically acceptable. Or their conclusions are based on unverified and unverifiable intuitions and hypotheses with no statistical support whatever.

In the area of pronunciation, we have gone beyond the usual limited scope of testing. For example, the investigation of the voicing or other treatment of medial /t/, was in previous studies often restricted to /t/ between vowels. We began, of course, with this intervocalic /t/, but went on to study medial /t/ in other environments:

\[
\begin{align*}
\text{lntl} & \quad \text{between lnt and a vowel} \\
\text{lt} & \quad \text{between l and a vowel} \\
\text{ltv} & \quad \text{between ltv and a vowel} \\
\text{ltv} & \quad \text{between a vowel and ltv} \\
\text{lnl} & \quad \text{between two ln} \\
\end{align*}
\]

We were thus able to establish convincingly that /t/ behaves differently according to the type of environment.

In the case of the so-called "Canadian diphthongs," we were able to show how the voicing of medial /t/ just described actually fails to interact with the choice of diphthong in the way usually taken for granted (in other words, write and writer contain the same diphthong). In the same way we demonstrated that the pronunciation of the ending (-ing) is strongly influenced by the grammatical function of the word to which it is attached. Our technique of handling the "special profile words" breaks new ground in the study of unsystematic sound alternations, as does our analysis of potential "rhyme words."

In our lexical studies we also broke new ground with a detailed analysis of the distribution of word preferences in our 24-cell grid, with our sociolinguistic study of a set of local words, and with our computer analysis of the semantic features attached to a group of near synonyms.

As far as grammatical matters are concerned, we developed new techniques which add substance to current discussions about the difference between a speaker's competence (i.e., his or her basic grasp of the grammar of his own language) and his or her performance (how he or she actually uses language in practice). By judicious questioning we have obtained responses to these matters that can be quantified objectively. We have also established, with firm statistics, which grammatical structures are "preferred," which are "stigmatized," and which are "prestigious."

Our results thus show that, in all aspects of linguistic study, the statistically-oriented approach which we adopted can provide a firm, scientific basis for valid statements.
about the different ways in which men and women handle language, about the
differences currently going on in the speech of the young as compared with the old, and
about the preference and rejection of particular linguistic forms by the different status
groups in the population.

Some facts of a general kind relating to our survey should also be borne in mind:

1. We handled an exceptionally large number of informants—300—which in itself is an
important factor contributing to statistical reliability.

2. Within the bounds of Greater Vancouver we covered a very extensive area for an
urban survey. From Lion’s Bay in the north to White Rock in the south, for example,
is a distance of about 80 kilometres.

3. At the time of our interviews, the total population of Greater Vancouver (of which
our survey handled a representative sample) was well above one million and a
quarter.

4. Unlike many earlier surveys which concentrated on the ghetto areas of various
cities (New York, Belfast, etc.), our survey dealt with the full range of socio-
ecconomic status groups from class I to class IV.

In conclusion, it could be claimed that the unique value of the SVEN research resides
in its scope (the large number of informants) in the intricately structured pattern by
which informants were organized into 24 contrasting cells, in the linguistic and stylistic
range of the survey questions and in the enormous mass of computerized data which
has allowed and will continue to allow researchers to establish accurately what
correlations exist between the recorded responses and the various sociological
factors.

The Vancouver survey is in one sense completed, but in another sense it could be
said to be just beginning, for now that we have succeeded in establishing all the
SVEN materials in a proper archival setting, serious enquirers from other places will
be welcome to utilize our database for the furtherance of whatever legitimate projects
they may have in mind.

9. THE QUESTIONNAIRE

The full text of the questionnaire is given here in its revised form. The original section
IV has been deleted (intended to elicit an informal register, it proved to be redundant),
and the subsequent sections have been renumbered. Missing numbers refer to
questions that were dropped. Questions added to the original questionnaire are
followed by letters. When one word is preceded by a range of numbers, each number
refers to a different phonological feature. This revised version is the form which was
actually used by our fieldworker during the course of the survey.
An Urban Dialect Survey of the English Spoken in Vancouver (1979-84)

Section I  Background Information
Section II  Visual-Aural Prompting
Section III  Word List
Section IV  Grammatical Variation
Section V  Local Words
Section VI  Reading Passage
Section VII  Questions about Vancouver
Section VIII  Spontaneous Narrative
Section IX  Series
Section X  Word Pairs
Section XI  Subjective Attitudes and Language Awareness
Section XII  Supplementary Information

1. ID#  
2. Sex  

Section I: Background Information

First I'd like to ask you for some information about your own background and that of your family.

3. What year were you born?

4. Where were you born?

5. (If not born in Vancouver) At what age did you come to Vancouver?

6. Where else have you lived? For how long? (In sequence)

7. What different parts of the Greater Vancouver area have you lived in, and about how long in each?

8. Where did your father come from?

9. What was his mother tongue?

10. (If necessary) About how old was he when he came to Canada?

11. (If necessary) About how old was he when he came to Vancouver?

12. Do you know what level of formal education he reached?

13. Where did your mother come from?
14. What was her mother tongue?
15. (If necessary) About how old was she when she came to Canada?
16. (If necessary) About how old was she when she came to Vancouver?
17. Do you know what level of formal education she reached?
18. Where did your father's father come from?
19. What was his mother tongue?
20. Where did your father's mother come from?
21. What was her mother tongue?
22. Where did your mother's father come from?
23. What was his mother tongue?
24. Where did your mother's mother come from?
25. What was her mother tongue?
26. What generation Canadian are you?
27. What do you consider your (principal) ethnic background?
28. Where does your present spouse (partner, etc.) come from? (Or, if applicable) Where did your husband/wife come from? (If relevant, same question re former spouse or spouses).
29. What is/was his/her mother tongue?
30. (If applicable) At about what age did he/she come to Canada?
31. (If applicable) At about what age did he/she come to Vancouver?
32. What is/was his/her occupation?
33. Do you know what level of formal education he/she reached?
34. Is there any other person, or group of people with whom you spend a lot of time who do not come from Vancouver? If so, where do they come from?

***************************************************************
35. Now I want you to think back to when you were 6 years old, who was in your family?

36. Did anyone else who was not related to you live with you in the same house? If so, do you know where they came from?

37. Can you describe the house to me briefly and the neighbourhood you lived in?

38. What school did you attend?

39. What was your father's/mother's main occupation? (Record mother's occupation if father dead or absent).

40. (If above is father's occupation) Did your mother have a job? What was it?

41. Now jump ahead in your memory to the time when you were 14, where did you live?

42. (If different location from #37) Can you describe briefly the house and neighbourhood? Was this a better place to live?

(If same location as #37) Can you describe any changes in the neighbourhood or in your family's circumstances during those years?

43. What school did you attend?

44. Did your father (mother) hold the same job as earlier? If not, what was his (her) job at that time?

45. (If above is father) Was your mother working outside the home? If yes, what was her job?

46. Omitted (Question re family income, see section XII)

47. When you were a teenager, did you spend any amount of time with people from another ethnic group, especially those having a different mother tongue from yours? If so, which?

48. What grade in school did you complete?

49. (if #48 less than Grade 12) How old were you when you left school?
50. Have you any further education? (Describe)

53.

54. What job do you do now? (Ascertain exactly; if retired or unemployed enquire re last job held.) How long have you been doing this kind of work?

55. What other jobs have you done previously? (Do not include temporary or summer jobs.) For how long?

56. Have any of your jobs required special use of language? Specify.

57. Do you speak any other languages fluently besides English? Which?

58. What special interests do you have apart from your principal job? (sports, hobbies, clubs, volunteer work, leisure time, pursuits, moonlighting)

59. Do you watch TV regularly?

60. About how many hours in the past week (or per day)?

60a Do you watch the news on TV? Which channel?

60b What other channels or shows do you usually choose?

61. Do you listen to the radio every day? Background music or talking programs?

62. Station and/or announcer preference?

62a Which news, if any?

63. What do you think of the CBC programs on radio and television?

64. Would you consider the CBC announcers' language an example of good Canadian English?

Section II: Visual-Aural Prompting

A. Visual Prompting (22 charts of pictures etc.; P=picture and M=map)

What is this?
Chart 1

65. butterfly (P)
66-67. painting (P)
68-70. caramels (P)
71. clock (P)
72-73. sandwiches (P)
74-75. mirror (P)
76-77. vase (P)

NOTE: Underlined items can constitute multiple questions each with its own number. Thus in the word vase, a (Q.76) might be [ei], [æ], [a:] or [æ], while s (Q.77) might be [z] or [s].

Chart 2

78-79. lighthouse (P)
80-81. palm (of hand) (P)
82. buttons (P)
83-86. garage (P)
87. Hallowee’en (P)

Chart 3

88. married (P)
89-91. tomatoes (P)
92-93. mountains (P)
94-95. bicycle (P)
96. bike (P)

NOTE: Each item (letter or cluster) is a separate question with its own number: Thus a (Q.89) might be [æ:], [æ], [a:] or [æ]; t (Q.90) might be [t] or [d]; and oe (Q.91) might be [o:], [ou] or [ə].

Chart 4

97-98. raspberries (P)
99-100. whipped cream (P)
101. rice (P)
102-103. newspapers (P)

Chart 5

104-105. pen and pencil (P)
106. diaper (P)
107-108. groceries (P)
109. curtains (P)

Chart 6

110. ceiling (P)
111-112. Mountie (Mounted Policeman) (P)
113. thermometer (P)
114-116. temperature
117-119. theatre (P)
120. dangers (P)
121. salis (P)

Chart 7

122-123. awning (P)
124. centre (P)
125-126. quarter (P)
127. yellow (P)
128-130. bright yellow (P)
131-133. typewriter (P)
134-135. palm (tree) (P)

Chart 8

136. fence (P)
137. front yard/garden, lawn, etc. (P)
138. back yard/garden, etc. (P)
139. milk (P)
140. khaki (P)
141. professor (P)
142-143. students (P)
144. lecture (P)
145. mouth (P)

Chart 9

146. balcony (P)
147-151. potato (P)
152. butter (P)
153. melting (melted) (P)
154. doll (P)
155-157. vegetables (P)
158. carrots (P)
Chart 10

159-161. schedule (P)
162. ear (P)
163-164. earring (P)
165. books (P)
166-168. wheelbarrow (P)
169. pumpkin (P)
170. puncture (P)
171. oil (P)

Chart 11

172. school (P)
173. missile (P)
174. legs (P)
175. albums (P)
176. record (P)

Chart 12

177. foot (P)
178. apricots (P)
179. egg (P)
180. whale (P)
181. pegs (tent) (P)
182. cartoon (P)
183. cookies (P)

Chart 13

184. dentist (P)
185-187. almonds (P)
188. salted (almonds) (P)
189-190. salt and pepper (P)
191. shelter (bus) (P)
192. wall (P)
193. fifth (P)
194. turtle (P)

Chart 14

195-196. library (P)
197-199. oranges (P)
200. altar (P)
201-202. roll and butter (P)
203. pictures (P)

Chart 15

204-205. iron (P)
206-209. February (P)
210-211. frying pan (elec.) (P)
212-213. bacon and eggs (P)
214. tulips (P)
215-217. waterfall (P)
218. building (P)
219. windows (P)

Chart 16

220. Canada (M)
221-222. United States (M)
223. Atlantic (Ocean) (M)
224-225. Arctic (M)
226-228. British Columbia (M)
229-230. province (M)
231. Alberta (M)
232-233. Quebec (M)
234-238. Newfoundland (M)
239-240. Vancouver (M)
241-242. Vancouver Island (M)
243-244. Edmonton (M)
245. Calgary (M)
246. Winnipeg (M)
247-249. Ottawa (M)
250-253. Toronto (M)
254-255. Montreal (M)

Chart 17

256. carpet/rug (wall to wall) (P)
257. wall to wall
258. rug/carpets (P) (area)
259. can/tin (P)
260. canned fruit/tinned fruit (P)

Chart 18

261. lawn mower (P)
262. mow lawn/cut grass, etc.
263. sofa/chesterfield/couch, etc. (P)
264. tap(s)/faucet (P)
265-266. lying/laying (P)
267. cutlery/flatware/silver etc. (P)

Chart 19

268. station/depot (P)
269. train (station) (P)
270. railway/railroad (tracks) (P)
271-272. TV/Tube, etc. (short name for television) (P)
273-274. Santa Claus (P)
275-276. fry(ing) pan/skillet, etc. (P)
277. stove/range (P)
278. blind(s)/shade(s) (P)
279. drapes/curtains (P)

Chart 20

280. house (P)
281-285. verandah/porch (P)

Chart 21

286-287. 2.45 etc. (P)
288-289. quarter (x2)
290-291. 11.15 etc. (P)
292-293. 10.30 etc. (P)
294. thirty

Chart 22

295-296. W (P)
297. Z (P)

B. Aural Prompting

298. What do you call your evening meal? (dinner/supper) Do you ever use (supper/dinner)?

299. What is the difference between a dinner and a supper?

303. What do you think is the difference between an apartment and a suite?
Opposites

I will read out a number of words and I'd like you to tell me their opposites, e.g., hot-cold

304. (north) - south
305. (summer) - winter
306-307. (broad) - narrow
308. (longer) - shorter
309. (day) - night
310. (mother) - father
311-312. (son) - daughter
313. (princess) - prince
314. (duchess) - duke
315. (playing) - working
316-317. (ugly) - beautiful
318. (inside) - outside
319. (clean) - dirty
320-323. (with a book) - without a book
324. (afternoon) - morning
325-326. (inner) - outer
327. (an old house) - a new house
328. (this yard) - that yard
329. (seldom) - often
330-331. (true) - false
332-333. (lend) - borrow
334-335. (nothing) - something
336-338. (whispering) - shouting
339-430. (farther) - nearer
341. (bad) - good
342. (a stormy sea) - a calm sea
343. (female) - male
344. (there) - here
345-346. (today) - tomorrow
347-348. (this year) - that year/last year/next year
349-350. (darker) - lighter

Section III: Word List

(Cards 1-11; 15 items on each)

Please read out the words on these cards as naturally as you can. Before beginning a new card, read its number.
Card 1

351. school
352-354. orange
diaper
false
357. khaki
typewriter
361-362. apricot
363. missile base
364. leisure
sense
367-369. schedule
370. caught
371-372. good morning
again
401-402. during

Card 2

374-375. something
376. lieutenant
calm
377-378. leggings
381-383. caramel
384-385. library
386-389. salted almonds
genuine
temperature
393. milk
394-396. quantity
lecture
398-399. arctic
student
400. during

Card 3

403-404. sentence
naturally
407-408. guarantee
alcohol
411-412. hearing aid
congratulate
414-415. city council
known
417. heart attack
418. sterile
419. luxury
420-422. shouting
423-424. beautiful
425-427. wheelbarrow
428-429. water

Card 4

430-432. dual purpose
433-434. secretary
435-436. united
437-439. theatre
440. button
441-442. futile efforts
443-444. anything
445. point of view
446-447. father-in-law
448. dirty
449. prestige
450. oil
451-453. newspaper reporter
454-455. groceries
456. sherbet

Card 5

457-458. reduce
459-460. often
461. sorry
462. recognize
463. generally
464. with
465-466. because
467-468. sandwiches
469. Elsie
470. fifth
471-472. vase
473-474. iron
475. marry
476-477. talking
478-480. potatoes
Card 6

481-483. garage
484-485. going
486-487. our house
488-490. tomato
491-492. nearer
493. south
494-495. living room
496-497. an important notice
498. badminton
499-500. daughter
501-502. night hawk
503. buildings
504-505. nuclear
506. why
507-508. charter flight

Card 7

509-510. nothing
511-514. February
515-516. asphalt
517-518. always
519. either
520. been
521-522. Wednesday
523. regular
524-525. human beings
526-527. vegetables
528-529. actually
530-531. Grouse Mountain
532-533. dental centre
534-536. whatever
537. tax shelter

Card 8

538. nice
539-540. cook book
541-542. mirror
543-544. dancing
545. structure
546-547. very good
548-549. the twenty-third psalm
550. carton
551. album
552-553. vocabulary
554. foreign
555. window-pane
556. neutral
557. little
558. pulse

Card 9

559. plenty 588-590.
560. curtains
561-562. ladies and gentlemen
563-564. clothespeg
565. balcony
566-568. flight attendant
569. once
570-572. Eaton's Catalogue
573-574. ham and eggs
575. neither
576-577. Saturday
578. particular
579-582. interesting
583-586. The Vancouver Province
587. winter

Card 10

588-590. What's the matter?
591-594. without a doubt
595-597. It's in storage
598-599. I live in Vancouver
600. back and forth
601-602. about a mile away
603-605. Aren't you coming?
606. Not yet
608. Should I?
609-611. You're alright
612-614. Where were you?
615-617. I know what you mean
618. He insulted me
619-621. What's that?
622-623. Is this your file?
Card 11

624-625. British Columbia
626-628. Washington
629-631. Ottawa
632-635. New Westminster
636. Seattle
637-638. Quebec
639-642. Toronto
643-644. Oregon
645. Kitimat
646-647. Kitsilano
648. Alberta
649-652. Newfoundland
653. Canada
654-655. Capilano
656. Winnipeg

Section IV: Grammatical Variation

Part A  I will read two or more sentences that say the same thing in different ways. Please listen and tell me:

(a) which sounds more correct to you;
(b) whether you yourself would say it that way;

Additional information. Please tell me:
(c) which you would most likely use in an informal, relaxed situation, say talking to some friends;
(d) whether you would use none of these, but a completely different word or phrase.

657. Have you got enough money?
658. Do you have enough money?
659. Have you enough money?

661. He was standing behind me.
662. He was standing in back of me.
663. He was standing back of me.
664. He was standing in behind of me.

665. The car is behind the garage.
666. The car is in back of the garage.
667. The car is back of the garage.
668. The car is in behind of the garage.
Yesterday he drank 3 glasses of milk.
Yesterday he drunk 3 glasses of milk.

Today he has already drank 2 glasses of milk.
Today he has already drunk 2 glasses of milk.
Today he has already drunken 2 glasses of milk.

Boughten bread isn't as tasty as homemade.
Bought bread isn't as tasty as homemade.

There's 8 eggs in the fridge.
There are 8 eggs in the fridge.
There're 8 eggs in the fridge.

I've often brung them home with me.
I've often brought them home with me.
I've often broughten them home with me.

Mary is sitting between John and I.
Mary is sitting between John and me.

Just between you and me, I think she's wrong.
Just between you and I, I think she's wrong.

Me and Helen are going shopping.
Helen and me are going shopping.
Helen and I are going shopping.

I'm always short of money, aren't I?
I'm always short of money, am I not?
I'm always short of money, ain't I?

Yesterday he laid in the sun for 3 hours.
Yesterday he lay in the sun for 3 hours.
Yesterday he lied in the sun for 3 hours.

My house is very different to yours.
My house is very different than yours.
My house is very different from yours.

There are less people here today than yesterday.
There are fewer people here today than yesterday.

He gave it to Tom and I.
He gave it to Tom and me.
721. They sneaked into the theatre.
722. They snuck into the theatre.
725. He don't bother me.
726. He doesn't bother me.
729. She's a real nice lady.
730. She's a really nice lady.
733. Where's my gloves?
734. Where're my gloves?
735. Where are my gloves?
737. I didn't see any money in the box.
738. I didn't see no money in the box.
741. He dived into the water.
742. He dove into the water.
745. If we had of seen you, we would have spoken to you.
746. If we hadda seen you, we would have spoken to you.
747. If we would of seen you, we would have spoken to you.
    If we would have seen you, we would have spoken to you.
    If we had seen you, we would have spoken to you.
    If we saw you, we would have spoken to you.
    Had we seen you, we would have spoken to you.
749. If I were you, I'd vote against it.
750. If I was you, I'd vote against it.
753. He don't like anything.
754. He don't like nothing.
755. He doesn't like anything.
756. He doesn't like nothing.
757. Don't let's take the bus.
758. Let's not take the bus.
759. Let's don't take the bus.
761. Well, anyways, that's all over now!
762. Well, anyway, that's all over now!
765. We used not to go there.
766. We didn't use to go there.
767. We usedn't to go there.
768. We never used to go there.
769. He must have forgot my name.
770. He must have forgotten my name.

773. You shouida seen him run.
774. You should of seen him run.
775. You should have seen him run.

777. If I went home, I would have found it.
778. If I hadda gone home I would have found it.
779. If I had of gone home I would have found it.
    If I would of gone home I would have found it.
    If I would have gone home I would have found it.
    If I had of went home I would have found it.
    Had I gone home, I would have found it.

781. Do you like these kinds of apples?
782. Do you like these kind of apples?

785. Who did you give the book to?
786. To whom did you give the book?
787. Whom did you give the book to?

789. I saw him yesterday.
790. I seen him yesterday.

793. If it was warmer, we could go for a walk.
794. If it were warmer, we could go for a walk.

797. You don't need to prove that. It's already been proven.
798. You don't need to prove that. It's already been proved.

801. Can you lend me $5?
802. Can you loan me $5?

805. After we ate dinner, we played cards.
806. After we had eaten dinner, we played cards.

You knock on the door. In answer to the question "Who's there?" you answer—
809. It's me!
810. It's I!

813. (To a child, or a dog)
814. Lay down right away!
815. Lie down right away!
817. It has *laid* there all night.
818. It has *lain* there all night.
819. It has *lied* there all night.

Someone asks you for something that is in the backyard, behind the house.
822. You'll find it *out in the back*.
823. You'll find it *out back*.
824. You'll find it *in the back*.

Part B  Here are a number of sentences containing "eh." Please tell me:

(a) Which ones you would say;
(b) Which ones you consider ungrammatical or in bad taste.

825. Nice day, eh?
826. It goes over here, eh?
827. Oh, you're still here, eh?
828. Think about it, eh!
829. What a game, eh!
830. What are they trying to do, eh?
831. This girl is up on the 27th floor, eh, there she gets out on the ledge, eh, ....
832. Eh, what did you say?
832a Thanks, eh!
832b "Eh" comments

Part C  Following are some sentences containing "gotten." Please tell me

(a) which ones you would say
(b) If you would not use "gotten," what would you say? "Got"? Something else?

833. I haven't gotten over my cold yet.
834. It had gotten colder.
835. You might have gotten killed.
836. She was supposed to have gotten there at 3.
837. He had just gotten the refrigerator working when the power failed.
838. If I hadn't gotten my feet braced in time, I would have fallen.
839. You should have gotten up earlier.
840. Have you gotten an answer to your letter yet?
841. She's finally gotten to try it.

**Section V: Local Words**

Now I am going to ask you about some local words and expressions. Please tell me:

(a) what each one means, if you know;
(b) whether you have ever heard anyone say it;
(c) whether you use it yourself;
(d) additional information.

842-844(a). saltchuck

845-847(a). skookum

848-850. a Siwash (referring to a person)
850(a). Is it a derogatory term?
850(b). How long since you've heard anyone use this term?
850(c). Additional information.

851-853(a). a Squamish (having to do with weather)

854-856(a). oolichan
856(b). Do I pronounce this correctly? [ˈuːtʃɪkən]

857(a). saskie
857(b). What is its plural?
857(c). Does it have an Indian connection?
857(d). Saskabush
857(e). Do only people here on the west coast use that term, or is it used elsewhere also?
857(f). Do you know any other terms for "prairie dwellers"?

858. What is a slough?
859. Do you know of any sloughs in this region?
860. How do you spell it?
Earlier I heard you pronounce Kitsilano [kɪtsəˈloʊ]. Is this your usual pronunciation? Does it rhyme with Capilano?

Have you noticed that some people pronounce it differently?

Have you changed your own pronunciation?

Who do you think would pronounce it that way?

Is one right and the other wrong?

How do you think it came to have different pronunciations?

Section VI: Reading Passage

I'd like you to read this short story aloud. Please don't read it as if you were in school, but as naturally as you can. Pretend you are reading it out to some friends.

"Hi, Mum!" Barry shouted running into the house. "What's for supper tonight? This morning at the library I saw Mary Wilson, a girl I knew in high school. She's been working for the past year and is just beginning at UBC. I want to call her now and I'd sure like to ask her to supper. How about it, eh?"

His mother was in the living-room putting up a new mirror she'd just bought at Eaton's. "That'll be all right, dear," she answered in her usual calm and leisurely way. I've invited Aunt Dorothy and Uncle Harold also. We're going to have the trout your father caught last Saturday, with potato salad, mixed vegetables, and sliced tomatoes. Apricot whip for dessert with almond cookies. A real hot weather meal, nice and easy to prepare!"

"That's fantastic, Mum! Mary and I wanted to see a Peter Sellers picture at the Vancouver East Cultural Centre. It's supposed to be very good, so we'd better be there by a quarter past eight to be sure of getting seats. Any chance we might eat a little early?"

"I'm sorry, son, we can't possibly eat for about an hour and a half. If I'd known, we could have eaten sooner. But I was late getting things started because the electricity went off this afternoon. You'll have plenty of time, anyway. Why don't you ask Mary to come over right away, so we can start eating once it's ready? I'm sure it won't bother your father to eat early, as he has a heavy schedule of work for this evening."

"Okay, Mum. Say, can I have something to eat now? I only ate egg sandwiches for lunch and an orange, so I'm starving. What's in the fridge?"

"Help yourself to anything, Barry, except for the makings of tonight's meal, naturally. There's bread and butter and malted milk, or whatever else you like. When you're finished, would you carry that carton of empty bottles out to the garage? Mike's been out there nearly all day working on that old Pontiac he got on Tuesday. The brakes are faulty and there also seems to be something wrong with the steering wheel, so it's important to get all that fixed before driving anywhere. He's talking about going to
Eastern Washington for Saturday and Sunday. While you're out there, you can remind him we're having company for supper. Tell him there's plenty of hot water when he wants to wash up. He's probably very dirty!"

A little later Barry went out to pick Mary up in his father's Falcon. After she'd been introduced to the Walters family, they noticed she was wearing a cast on her right leg, and begged her to tell them the details of what had happened.

"Last Wednesday I was riding my bike down Balsam Street towards Kitsilano Beach when I accidentally ran the front wheel through some oil and skidded. After a futile attempt to keep my balance I fell. It was right in front of a dentist's office, and somebody who was looking out of the window rushed out and drove me down to the Vancouver General Hospital without waiting for an ambulance. Unfortunately I had fractured my leg. Actually I had a narrow escape, as it could have been much worse. I hate not being mobile, particularly as I always enjoy dancing so much. I can't go swimming either. But wasn't it interesting my meeting Barry again today? We were in a lot of the same groups our last year in school, probably because both our last names begin with W. But I almost didn't recognize him."

"What have you been doing since high school, Mary?" asked Barry's grandmother, who had come from Edmonton to visit her son and daughter-in-law.

"During the winter I went to business college, and since February I've been working as a secretary at City Hall. From our office building there's a wonderful view of the North Shore mountains. It was a very interesting job, especially as I often got to attend council meetings. I gained a lot of valuable experience, but I'm really enjoying being a student and attending lectures. My parents live in the United States, you know, south of Bellingham, but I've been living in Vancouver with my aunt on Fifth Avenue since I was thirteen. I wish they were nearer, of course, but we see each other regularly."

"Do you really find living in Canada preferable to the U.S.A.?" asked Mrs. Walters. "I certainly do," answered Mary. "Someday I'd like to become a writer and settle down here in this beautiful province of British Columbia, but right now I'm trying to decide whether or not to become a Canadian citizen. Without that I couldn't get the job I want in Ottawa after I've graduated."

After dinner, everybody congratulated Barry's father for catching such delicious fish, and his mother for being such a good cook. Then they all sat out on the balcony until 7:30, when it was time for Barry and Mary to leave for the theatre.

Section VII: Questions about Vancouver

Now I'd like to ask you some questions about Vancouver.

1. What do you think of Vancouver as a place to live? (I'd like you to tell me some of the things you do like about it, and if there is something you don't like).
2. What changes have you noticed over the years you've lived here? Are they for the better or worse?

3. Would you rather live in another part of town? If yes, why? If no, why do you like this part of town?

4. What improvements would you like to see made, either in your own district or in the larger city?

Section VIII: Spontaneous Narrative

(Suggest topics in the order A, B, C, D. Only one required).

A. If you won the lottery, what would you do with the money? (Or, if you suddenly inherited a very large sum of money, how would you spend it?)

B. Would you tell me about your last holiday (or a trip you've been on that you remember)?

C. Have you ever been in an accident or seen one happen? Could you tell me as much about it as you remember?

D. Have you ever been in a situation, recently or some time ago if you can remember it clearly, when you had a good laugh? Perhaps something funny or strange happened to you, or you saw it happen to someone else. Could you tell me about it?

Section IX: Series

862-868. 1. Would you please say for me the days of the week?
869-886. 2. Would you count from 13-30?
887-895. 3. Now please count by tens to 100.

Section X: Word Pairs

(Cards 12-16; 16 items on each)

Here is one last set of words I'd like you to read aloud. Please read these out in pairs, and read out the card number when beginning a new card.

Card 12

896-897. button - butter
898. baking - bacon
899-900.  dew - due
901.  matter - madder
902.  loud - lout
903.  news - noose
904-905.  parting - pardon
906-908.  inter-city - inner-city
909-910.  clouded - clouded
911-912.  marry - Mary
913.  whether - weather
914.  altar - alder
915-917.  storage - George
918-920.  lying - lion
921-922.  mountain - Mountie
923-924.  chowder - shouter

Card 13

925-926.  chants - chance
927-929.  nearer - near
930.  picture - pitcher
931-932.  caller - collar
933.  which - witch
934.  she wilted - he willed it
935.  hearty - hardy
936-938.  chlorine - flooring
939-940.  uncertain - inserted
941.  house - houses
942-944.  tutor - Tudor
945-947.  whiter - wider
948.  book - buck
949-951.  mirror - mere
952.  winter - winner
953.  berry - Barry

Card 14

954.  puncture - puncher
955-956.  cot - caught
957.  been - bin
958-959.  boring - born
960-961.  futile - feudal
962-963.  writer - rider
964-965.  balm - bomb
966.  peg - peck
967.  Canada - Kennedy
968-969.  very - vary
970-974. putting - pudding
975. do - dew
976. south - sour
977. planted - planet
978-981. wading - wading pool
982. wester - welder

Card 15

983-985. what else - belts
986. Harold - herald
987-990. we're united - you're divided
991-992. sense - cents
993. fracture - fraction
994. price - prize
995. sorted - sordid
996-997. spirit - spear it
998-999. vase - claws
1000-01. prints - prince
1002. our - are
1003-05. diaper - riper
1006-08. been - being
1009. fishing - mission
1010-12. dual - jewel
1013. could - cud

Card 16

1014-15. falling - fallen
1016. bright - bride
1017-18. repulse - results
1020. bean - been
1021-22. Sam - psalm
1023. eggs - aches
1024-26. were - where
1027. knife - knives
1028. trading - trade-in
1029-30. about a mile - he bowed and smiled
1031. lake - leg
1032-33. Oregon - organ
1034. good - blood
1035-37. false - faults
1038-39. stalk - stock
1040-41. palm - Pam

135
Section XI A: Subjective Attitudes and Language Awareness

1042. Do you think Vancouver people speak differently from Victoria people? If so, how would you describe the difference?

1042(a). Do you think people who live in Vancouver city speak differently from those who live in your suburban area? (asked only of those living in outlying suburbs)

1043. Can you tell where English-speaking Canadians come from just by listening to them talk?

1043(a). If you had just met a stranger, do you think you could tell whether or not that person was from Vancouver?

1044. Can you recognize Americans from their speech?

1044(a). Can you recognize residents of the state of Washington as Americans by their speech?

1044(b). How?

1044(c). What is it about their pronunciation or the words they use that identifies them for you as American speakers?

1045. Can Americans tell from your speech that you're Canadian?

1045(a). How do they do this?

1045(b). Do you ever find yourself changing your pronunciation when you are with Americans, or in the United States?

1046. Have you changed your own pronunciation of any words over the years?

1046(a). Do you know why you changed?

1047. How do you feel about your own speech? (Explain 5-point scale).

| very dissatisfied | 5 |
| satisfied        | 1 |

Section XI B: Language Rating Scales

The following statements are opinions expressed by some Canadians. You may
agree with some of these statements and disagree with others. You are asked to indicate the extent to which you agree or disagree with each, using the five-point scale below, by putting an X over one of the letters as follows:

A  if you strongly agree
B  if you moderately agree
C  if you have no opinion one way or another (neutral)
D  if you moderately disagree
E  if you strongly disagree

There is no right or wrong answer. You are being asked only for your personal opinion. As first impressions are important, you should not think too long about any one statement. (Your anonymity will be respected).

1048. A British accent is more pleasant to listen to than an American accent.

agree /A/ /B/ /C/ /D/ /E/ disagree

1049. A native-born Canadian speaking with an accent which is more like a British than an American accent is obviously affected.

agree /A/ /B/ /C/ /D/ /E/ disagree

1050. The language of CBC announcers should be the standard for spoken Canadian English.

agree /A/ /B/ /C/ /D/ /E/ disagree

1051. Since the American spelling of some words is much more reasonable than the British, Canadians should use the American rather than the British spelling of these words.

agree /A/ /B/ /C/ /D/ /E/ disagree

1052. It makes no sense to speak of a uniquely Canadian English, differing from both "American English" and "British English."

agree /A/ /B/ /C/ /D/ /E/ disagree

Section XII: Supplementary Information

1053. Income Group (Family income)

A.  $ 000 - 6,000 per year
B.  6,000 - 9,999
C. 10,000 - 11,999
D. 12,000 - 14,999
E. 15,000 - 17,999
F. 18,000 - 20,999
G. 21,000 - 24,999
H. 25,000 - 29,999
I. 30,000 - 34,999
J. 35,000 and over.

1055. How many incomes contribute to household?

1056. Type of housing.

1057. Interviewer’s impression of dwelling.

1058. Area

Notes and Comments
Part Two: Analyses and Explanations

Visual-Aural Prompting in the Vancouver Survey Questionnaire

Margaret M. Murdoch

One complete section of the SVEN questionnaire (section II) was devoted to visual-aural prompting. As in a number of earlier surveys, pictures were used to elicit lexical items for which some variation was expected. Our principal motivation for expanding this section from our pilot survey, however, was its proven success in eliciting a less formal style for specific variables than the word list. Pronunciation elicited through pictures was not influenced by the printed word, and most informants relaxed and treated this section of pictures as a game, thus adding to the informality of the setting.

1. Visual prompting in surveys

Kinloch (1971: 46) reported in American Speech on his use of pictures to elicit mainly lexical items. We followed this practice in the Vancouver pilot survey (1976-78), but also included pictures which would elicit some instances of specific phonetic variables on which we wanted to focus. Woods (1979: 69, 298) expanded the use of this technique in his Ottawa Survey with the idea that the pictures "drew attention away from the linguistic situation," reducing as well the chances of reading pronunciations. In neither SVEN nor the Ottawa survey was any systematic attempt made to repeat the variable items in each of the five styles, and consequently, as Woods (1979: 302) admits, "no analysis of stylistic co-variation was possible."

Encouraged by our success in using visual prompting in the Vancouver pilot survey, we expanded this section for the full-scale SVEN survey to twenty-two charts.1 Pointing to the individual pictures in turn, the interviewer asked, "What is this?" or "What do you call this?" or posed questions about the pictures, such as, "What is the cat doing?" or "What colour is the circle?" etc. An unlabelled map gave us the opportunity to elicit Canadian placenames that exhibit interesting phonetic variability (Vancouver, British Columbia, Newfoundland, Toronto, Quebec, etc.) as well as some additional contexts for our regularly patterned phonetic variables (for example, Atlantic (ntV), United States (sIV), Calgary (shri), etc.). Hands on a clockface pointed to a quarter to, a quarter after, and half-past the hour. Informants were asked, "What time is it?" and "Do you ever say that another way?" A chart containing the last four letters of the alphabet provided an
opportunity to collect fairly informal pronunciations of the letter V as well as the zed/zee variable which everyone is familiar with, and which many commented on, providing, on occasion, valuable additional information. We were surprised at the number of [zə:] pronunciations; indications are that this form is making inroads in the Vancouver area (25% in the first analysis of our partial sample), not only among younger people influenced by Sesame Street and TV in general, but among older informants with business interests and contacts in the United States.

Our expanded visual prompting section contained 30 of the 39 phonetic variables under study (see p.16), most of them at least three times. And 28 individual words were elicited, including placenames. These 28 are "special profile" words, that is, words such as tomato, vase, zed, garage, etc., in which variability is to be expected but which do not follow a regular pattern (see p. 50). By means of the pictures, we were also able to elicit 24 lexical items, and one item showing morphological variability (lying/laying).

2. An innovative feature: aural prompting

Our aural prompting subsection was completely new. It was born out of the frustration of trying to find pictures to illustrate all our phonetic variables, as well as some lexical items like dinner/supper, and apartment/suite. We designed 34 aural prompting questions in all. Three of these elicited lexical information, while the rest asked the informant to supply the opposite of the word given by the interviewer containing desired phonological variables. For example, the interviewer, having first explained the task, said, for instance, "day," and the informant would be expected to reply "night." This method succeeded in having most informants concentrate on semantic relationships which is what they thought we were interested in, and this distraction probably produced a phonetic form closer to their everyday speech. In this section, 20 regularly patterning phonetic variables were tested, in a total of 40 instances, as well as 4 individual words (beautiful, often, something, without), and two lexical variants.

3. The elicitation of variable items

One of the main reasons for deciding to include, where possible, three examples of each phonetic variable was that if one instance was irretrievable, the informant's choice for that variable in that particular style was not lost. Lack of clarity, tape fault, the informant's not knowing or forgetting the term, or, in some cases, using another term that did not contain the desired variable might all cause such irretrievability. Knowledge that this variable would be repeated at least three times enabled the interviewer to relax and not to have to keep trying if one instance was missed.

Here, as in other parts of the survey, there were a number of serendipitous discoveries, mostly lexical in nature. For example, showing a camping scene in order to elicit tent/peg for phonetic reasons led to the discovery of lexical variety we had not been aware of (spikes, stakes, stakes, etc., as well as pegs). Again, by showing a picture of records
and their containers we hoped to elicit the word *album* (again, for phonetic reasons) and were successful in doing so frequently, but we found out en route that the reference for *album*, which used to be the record cover, is nowadays, as indicated by the responses generally, and especially for young people, the record itself (an *album as* opposed to a *single*), giving rise to new terms that would formerly have been redundant: *album cover* and *album jacket*.

To reiterate, our principal motivation for expanding this visual and aural section from its earlier version was its proven success—in comparison to a word list—in eliciting a less formal style for specific variables. In the interview itself, the picture charts were produced immediately following the rather lengthy and detailed introductory background information section, forming the first linguistically-oriented task, as far as the informants were aware. Most informants relaxed and treated it as a game, sometimes talking freely about individual pictures or about memories they evoked. Although supplementary questions were not usually necessary, if required they often set the scene for a further breakdown in formality, providing on occasion for relatively unguarded speech on the part of the informant.

It is hypothesized that the visual-aural prompting section is the most informal of the non-continuous speech styles, and will elicit the third most careful style of speech, after minimal contrast and word list styles. The four accompanying graphs (see Appendix) illustrate the voicing of medial [t] and/or its hypercorrection to aspirated [ʰtʰ] in the three styles mentioned. These data, based on our mini-sample of 148 informants (approximately 50% of the total sample), seem to support our hypothesis.


1. The visual prompting subsection consisted of 22 charts: 19 of them held coloured magazine pictures mounted on posterboard (9x12 in.); one was a map of Canada without names; one showed clockfaces, and one the letters WXYZ. The aural prompting was of two kinds. A few questions were designed to produce lexical items difficult to represent pictorially, and the 31 antonyms asked for were intended to elicit desired phonetic variants.
Appendix: Medial [t]
in Visual-Aural, Word List and Minimal Contrast Speech Styles

Data for these graphs based on 148 informants (approximately 50% of total SVEN sample).

Graph 1: VtV

SVEN VtV  \[d\]  AV - Visual-Aural Prompting
\[t\]  W - Word List
MC - Minimal Contrasts

Graph 2: Vt (ing)

SVEN  Shouting  AV  \[d\]  AV - Visual Aural Prompting
Shouting  W  \[t\]  W - Word List
Putting  MP  MC - Minimal Contrasts

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Graph 3: VtV (united)

Graph 4: rtV

SVEN VtV united

SVEN rtV dirty - AV
dirty - W
hearty - MP

AV - Visual Prompting
W - Word List
MC - Minimal Contrasts
Reading Passages and Informal Speech

Margaret M. Murdoch

This paper on pilot survey methodology discusses preliminary results from the speech data of eight informants for two variables, (VIV) and (ing), in reading passage style. It appears from these data that a reading passage can present information on informal speech. This is contrary to the usual expectations that a reading task will elicit formal speech.

1. The pilot survey

The data on which this paper is based were collected in the course of a pilot survey of Vancouver speech between 1976 and 1978, during which time I interviewed 54 informants in their homes. Each interview, lasting approximately one and a quarter hours, was questionnaire-based, and tape-recorded in its entirety.¹

1.1 The sample

The informants were chosen by a random sampling procedure which, on the advice of our consultants in the Department of Anthropology and Sociology combined features of a quota system and a system of geographical distribution within Vancouver proper, then a city of some 500,000 inhabitants.₂ We were dealing with a small sample using broadly defined occupational categories to stratify our informants socio-economically. The geographical distribution was based on the census tracts with supplementary information provided from the 1971 census figures. A large area had to be covered on foot by one interviewer during two summers, a part of which also was necessarily spent discovering suitable informants by door knocking. Thus, the original idea of very broad geographical coverage remained theoretical at this pilot stage. Nonetheless, the population breakdown contained in the census tracts proved a very useful device: I eliminated at the outset all tracts in which the percentage of those not speaking English in the home was greater than the average for the city of Vancouver in order to save days of unproductive trudging.
1.2 The informants

The sample for the pilot survey was stratified in such a way as to yield three age groups and three broad socio-economic levels for each sex, with three informants in each slot, making a total of fifty-four. By age, the divisions were 16 to 29 years, 30 to 59 years, and over 60 years. Socio-economic levels were fairly arbitrarily determined by occupation, i.e., roughly blue collar, white collar, and professional or management. In general, the criteria for choosing informants were that (1) they should have been born in Vancouver or have come there to live before beginning school, and (2) they should have remained in the city through most of their formative years, as well as living there during a large part of their adult life. And, of course, for this was a survey of Vancouver English-speakers, (3) they must be native speakers of English, and (4) have spoken English as their first language in the home.

2. Reading passage style

One very interesting result has emerged, having to do with the style of the reading passage. In dialect surveys, the reading passage, if used, has traditionally been considered as a source of information regarding formal style. This assumption was based on the hypothesis that the very act of reading a connected passage aloud would produce in most informants immediate self-consciousness, thereby causing them to shift to a style of speech only slightly less formal than that used in the reading of word lists and minimal pairs. Both Labov (1966: 95-96, 132-33; 1972: figs. 4.1 and 4.2) and Trudgill (1974: 47) have made statements along these lines. Labov referring to "Context C" and Trudgill to "Reading Style." Both suggest that instructions to the informant to read "as naturally as possible" will assist in "standardizing the style for all speakers towards the informal end of the range of possible styles in this context" (Trudgill 1974: 47). Both agree that the real effect of such instructions is very slight. In fact, Labov (1966: 96) states:

There is no danger that the instructions given will bring reading style to a point where it becomes confused with careful conversation. The gap between Context B (careful speech as in the interview situation) and C (Reading Style), by every measure of performance, is so great that the effect of the bias introduced by the instructions is barely noticeable in reducing the difference.

Labov (1966: 132) then adds that "a few upper middle class speakers seemed to have the degree of control and self-awareness needed to modify their reading style in the direction of conversational style, but this is a rare effect and not a very large one."

Informal style is always more difficult to elicit than formal style in an interview, especially when interviewer and informant are strangers to each other, as is usually the case in
survey work. Because of my personal hunch that reading style might well be determined (and not just influenced, as both Labov and Trudgill suggest) by the nature and content of the piece to be read, as well as by the general environment of the interview, I attempted to design the reading passage for the Vancouver questionnaire in such a way that its informal style and familiar content would act as an invitation to informants to read informally.

This two-page story (see full text in questionnaire, section VI, pages 131-132) is set in a family situation. It consists mainly of conversation between a college-aged young man and his mother, and later of a dinner-table conversation between the young man's grandmother and a young woman friend of his, with a few descriptive sentences here and there and a summing up paragraph, all written in colloquial and informal style. At the same time it includes, as indicated by the underlinings, a great many items that we wished to include somehow in the informal style part of the interview as a check on similar items contained in word lists and minimal pairs.

As I handed these sheets containing the reading passage to informants, I always suggested they should "read as naturally as possible, as if reading to family or friends," but this sort of remark, as already suggested by Trudgill and Labov, in itself probably does not affect the reader's style very much. At the outset of the interview, however, I always spent a few minutes talking with the informants before the tape-recorder was turned on, assuming them that my interest was in "collecting" their ordinary everyday speech, that it was not a test in any way, and that I had no interest whatsoever in the "correctness" of a given form. By adopting a casual and relaxed attitude myself, by encouraging informants to talk on their own from time to time when they wanted to, and by varying the pace of the interview, I found that as a rule people were fairly well relaxed and often enjoying themselves by the time the reading passage was arrived at (about two-thirds of the way through an hour and a quarter long interview). Undoubtedly this also contributed to a general relaxation of formality on the part of informants when it came to reading aloud.

3. Analysis of data

Analysis of the data so far shows that this attempt to elicit informal style features through reading has succeeded to a surprising extent. (See Graphs 1 to 8.) As indicators of informal style, I have selected voicing of intervocalic [t], which most informants do not do in word list style, i.e., when reading aloud lists of words, and reduction of "-ing" (i.e., [iŋ]) in various ways (to [in], [iŋ] or [ŋ]). The vertical axis of the graphs registers the percentage of informal pronunciations of these indicators (i.e., voicing of intervocalic [t] -VM- and (ing) reduction). Along the horizontal axis appear three sections of the questionnaire in which one might expect to find an increasing degree of informality from left to right: first, word lists and word pairs (minimal contrast) are grouped together, then reading passage and, finally, casual speech and spontaneous narrative are paired.
In Graph 1, the informant (no. 40) is a male teacher of English at the secondary level, twenty-seven years old. Like most of the teachers interviewed, his percentage levels of informal speech indicators were very low for word lists/word pairs. For (VtV), marked with a solid line, voicing increased markedly from 4% to 84.6% in the reading passage, and slightly again to 92% in casual speech/spontaneous narrative. This informant's increase in the pronunciation of informal values of (ing), shown with a broken line, was less dramatic, but still appreciable, from 0% to 38%. It actually declined slightly for the casual speech/spontaneous narrative category to 30.4%.
The informant in Graph 2 (no. 12) is a male clerk in a liquor store, thirty-nine years old. His increase in informality for (VIV) was very marked, from 16% to 92.3% in the reading passage, with a slight drop to 84.2% in casual speech/spontaneous narrative. Again, for (ing) this informant had a smaller increase for the less formal variants, from 0% to 27.6% in the reading passage and a further slight rise to 42.9% in the casual speech/spontaneous narrative category, which we would expect to be the least formal of all.

Graph 2 Informant No. 12

VIV

(ing)
In Graph 3 (no. 31) we have a male of seventy-three years, a retired trainman. For (VtV) he showed a steady progression in informality and an increase in voicing from 16% in word lists/word pairs to 46.1% in the reading passage to 68.4% in casual speech/spontaneous narrative. For informal values of (ing) this informant started at 0%, progressing to 57% and only slightly more to 61.5% in the same categories.
Graph 4 represents a seventeen-year-old female meat-cutter (no. 17). She started high with a 62.5% incidence of voicing for the variable (VIV), increasing in a steady line to 77% in the reading passage, and ending with 100% voicing during casual speech/spontaneous narrative. This would appear to match the traditional idea, except for the very high occurrence of the informal indicator during the most formal part of the interview. This latter pattern seems to be common with young informants of the lowest socio-economic bracket studied. For the informal values of (ing), however, she went from 10% to 38% in the reading passage then down slightly to 30% in casual speech/spontaneous narrative.
The informant for Graph 5 is a female free-lance accountant, aged thirty-four years (no. 49). This person began at 0% for both indicators in the most formal part, increasing for the voiced values of (VIV) to 52% in the reading passage and further to 70% in casual speech/spontaneous narrative. Her informal (ing) values showed a progression to 14%, thence to 16%, a far smaller increase in informality.
In Graph 6, the informant (no. 32), a female of sixty-six years, was a head-nurse before marriage many years ago. Her husband and father were both professionals. She also started at 0% for both indicators in word lists/word pairs. There was a similar increase for each in the reading passage, to 23% voicing in (VIV) and to 24.1% for informal variants of (ing). Informal use increased, then, for (VIV) to 45.5%, while for (ing) it decreased to 12.5% in casual speech/spontaneous narrative.

Graph 6 Informant No. 32

I have added two graphs to the small sampling above that show how important it is to pay attention to the background material, either prompted or otherwise, provided by the informant in order to understand the patterns exhibited by some of these graphs.
Graph 7 represents a young female hospital kitchen worker, twenty-four years old (no. 35). She had a severe reading problem which she had to overcome to some extent in order to read a running narrative (more or less correctly) as in the reading passage, but found great difficulty in reading the word lists consisting of disconnected words without context. I helped her considerably with synonyms, rhyming words, clues as to meaning etc., so that she was able to produce most of the words required in the word list section. Because of the nature of her problem, this section could not be considered as "read," but rather as an example of her performance in an "oral prompting" situation. This, I believe, explains the apparent counter-example, in that her incidence of informality for (VtV) fell from 40% to 31.4% for the reading passage, rising again dramatically to 89.1% in casual speech/spontaneous narrative. It is interesting to note that for informal values of (ing), her response percentage rose from 10% in word lists/word pairs to 38% in the reading passage. The occurrence of this informal indicator lessened to 29.7% in casual

Graph 7 Informant No. 35

\[
\begin{array}{c}
\text{Word Lists and Word Pairs} \\
\text{Reading Passage} \\
\text{Casual Speech and Narrative}
\end{array}
\]

153
speech/spontaneous narrative, a common pattern among this set of informants.

Graph No. 8 shows a seventy-year-old male, a retired Indian agent (no. 58). His special interest in linguistic matters, including attendance at a number of summer and extension courses in linguistics at the university, explains, I think, his consistent pattern of a falling away from informality for both indicators. From the reading passage to casual speech/spontaneous narrative his scores decreased from 48% to 16.6% for (VIV), and from 34.5% to 6.3% for (ing), although he started low for both in the word lists/word pairs at 4% for (VIV), and 10% for (ing). This informant was obviously a linguistically aware and careful speaker whose increase of informal indicators in the reading passage underlines the point I am trying to make, that the nature of the reading passage largely determines the degree of formality with which it is read (cf. Rodman this volume).

Graph 8 Informant No. 58
I have also included a table (see Appendix) showing percentages for indicators of informal register for each informant interviewed. The statement of figures for 65 informants reflects the fact that 65 interviews did take place, of which only 54 qualified as "Vancouver speakers" according to our criteria. The omission of some interviews from final consideration does not, however, affect the validity of using the material gleaned from these interviews in this particular instance.

In conclusion, let me make the point that the percentages shown for word lists/word pairs reflect the picture that we obtain through a postal or other write-in survey in which the informants tell us what they think they say. In few cases is this even close to the real picture as indicated in both reading passage and casual speech/spontaneous narrative percentage scores. In other words, we may claim that most people are not aware of the extent to which they change levels of formality in pronunciation when they change registers. This is, however, clearly indicated when we analyse what they say during the same interview as the degree of informality and relaxation is varied.

A careful study of percentage figures given, even for such a small sample, will reveal how useful a source of information about informal style the reading passage can be, contrary to what has traditionally been thought.

A version of this paper was presented at the Third International Conference on Methodology in Dialectology at London, Ontario, in August, 1978.

1 This rather lengthy questionnaire was designed by me under the guidance of Professor Robert Gregg, in consultation with other members of the team, Miss Lil Rodman of the English Department, and Dr. Ruth McConnell of the Faculty of Education, all at the University of British Columbia.

2 It was decided beforehand that for purposes of this pilot survey, at least, we would adhere strictly to the criteria that the informants must have spend the greater part of their school years as well as most of their adult life in Vancouver proper.
### Appendix: Percentages for Indicators of Informal Register

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<th>% RP</th>
<th>% CS/SN</th>
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Reading Style

Lillita Rodman

To further investigate the effect of reading on speech styles, ten SVEN informants were revisited and asked to read a second reading passage as well as a prose version of their own spontaneous narrative. Comparisons of their results for variable (VIV) in the spontaneous narrative and reading passage sections of the original survey (SVEN) with those in the two reading passages of the second interview showed that the act of reading does indeed affect the speech produced and that "reading style" is a continuum of styles that depend in part on the nature of the passage read, but not necessarily only on its formality. The second interview appears to have been perceived as a less formal context than the first.

1. Introduction

It is standard practice in urban dialectology for the interview to include the following tasks:

1. the telling of a narrative in response to a question such as Labov's (1966) "Have you ever been in a situation where you thought you were in serious danger of being killed?"

2. the reading of a prose passage

3. the reading of word lists

The speech produced in performing these tasks is usually called "spontaneous speech," "reading style" or "reading passage style," and "word list style," respectively, and it is generally accepted that these styles vary in formality, with reading style being more formal than spontaneous speech and less formal than word list style.

This study addressed the following two questions about that portion of the stylistic variation continuum referred to as "reading style":

1. What impact does the actual act of reading have on the speech produced? To explore this question required a situation in which the only difference between two speech samples would be the fact that one was produced spontaneously and the other was read.
2. What impact does the nature of the reading passage have on reading style?
Although Trudgill (1974: 47) suggests that there is a range of possible styles in the
context of reading, and both he and Labov (1972: 81) state that the content and nature
of a reading passage will affect the speech produced, there does not appear to be a
study that measures such effects. To determine the impact of different passages, one
would have to compare the reading style elicited by at least two passages which differ
in some clearly specifiable ways.

2. Method

2.1 Overview

Dr. Robert J. Gregg very generously made the results of An Urban Dialect Survey of the
English Spoken in Vancouver (SVEN) available for this project, and Margaret Murdoch
agreed to conduct a second interview with some of the SVEN informants to record them
reading two passages:

1. a second standard reading passage (RPII) that had been designed to be less
   colloquial than the SVEN reading passage (RPI).

2. a reading passage version (RN) of each informant's own spontaneous narrative (SN)
   elicited during the SVEN interview (section VI) by questions such as "If you won the
   lottery, what would you do with the money?" or "Would you tell me about your last
   holiday?"

After the tapes of the second interview were transcribed by Erika Hasebe-Ludt, who
had also transcribed the spontaneous narrative section of the SVEN tapes, the
following four results were compared:

1) the SVEN spontaneous narrative (SN);
2) the reading of the spontaneous narrative (RN);
3) the SVEN reading passage (RPI);
4) the second, less colloquial reading passage (RPII).

The comparison of SN and RN was designed to indicate the impact of the act of
reading, for the only difference between the two samples should be that SN was
produced spontaneously and RN was read. The comparison of RPI, RPII, and RN was
designed to indicate the extent to which reading style depends on the passage read.
2.2 Phonological variable

The phonological variable selected was (VfV), the realization of /l/ in an intervocalic environment, both word internally and across boundaries. (VfV) Value #2 /fd/, the voiced value of this variable (see Trudgill 1974), produced the clearest case of stylistic stratification in SVEN (Figure 1; see also Gregg this volume). The variables that showed more subtle stylistic variation in SVEN would, of course, be very unlikely to show any differences within reading style, or between reading style and spontaneous narrative style.

Figure 1: Percentage of VfV Value #2 /fd/ by Style (SVEN N = 240)

2.3 Informant sample

Because of the exploratory nature of this investigation, only ten informants were used. The selection of informants, though, turned out to be somewhat more difficult, and consequently more arbitrary, than planned. The ideal sample would have been those informants with the greatest differences between their SVEN results for spontaneous narrative style and reading style because these would be most likely to also show variation within reading style. However, because the spontaneous narrative portion of the SVEN study had not yet been fully analyzed, it was impossible to identify this set of informants. The second plan was to select informants from those socio-economic cells that had produced the clearest stratification between the following styles: minimum contrast, word list, visual-aural prompting, and reading style. If all ten informants could have been chosen from one or two cells (such as old males of class IV) the study might also have had a socio-economic dimension. However, two problems precluded this approach: (1) some narratives contained only two or three instances of the variable;
and (2) several informants were unavailable because of illness, death, change of residence, or unavailability at the times when the fieldworker was free. Table 1 identifies the ten informants for this study by their SVEN socio-economic categories.

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<th>Number of Informants</th>
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<td>O</td>
<td>IV</td>
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<tr>
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<td>(5,6)</td>
<td>F</td>
<td>M</td>
<td>III</td>
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<tr>
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<td>F</td>
<td>M</td>
<td>II</td>
</tr>
<tr>
<td>2</td>
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<td>F</td>
<td>M</td>
<td>I</td>
</tr>
</tbody>
</table>

2.4 Spontaneous-narrative reading passage (RN)

In preparing the reading version of each informant's spontaneous narrative, as few changes as possible were made, particularly in the environments of (VIV). Of course, to elicit a reading style, the narrative had to look as much as possible like a prose passage. The first step was to remove all stutters, repetitions, awkward digressions, and brief passages that were responses to the interviewer's questions or prompts. Next, additional sentence boundaries were introduced if more than two or three clauses were joined with and, for example. Finally, the narrative was divided into paragraphs, using, where possible, already present paragraphing cues--such as then, next, and another thing. Where such cues were absent, paragraph divisions were introduced more arbitrarily, based usually on slight shifts in topic, but sometimes only on length. As might be expected, some narratives required much more intervention than others. Generally, though, it was surprisingly easy to convert most of the oral narratives to prose passages.

2.5 Second reading passage (RPII)

The second standard reading passage (RPII), reproduced in the Appendix, was designed to include (VIV) in exactly the same lexical items as in the original SVEN passage (RPI). However, to test what effect the formality of the passage might have on reading style, RPII was made somewhat less colloquial. Unlike RPI, RPII contains no dialogue or contractions. As well, instead of being a narrative, it is a report, and a domestic setting is replaced with an academic one. The differences in tone are
probably seen most clearly in the openings of the two passages:

**RPI:** "Hi, Mumi!" Barry shouted running into the house. "What's for supper tonight? This morning at the library I saw Mary Wilson, a girl I knew in high school. She's been working for the past year and is just beginning at UBC. I want to call her now and I'd sure like to ask her to supper. How about it, eh?"

**RPII:** Dr. Peter Brown, an eminent scholar and scientific writer, has been invited to address a meeting of Child Psychologists in Vancouver on Saturday. Dr. Brown graduated from a British university and has been working in hospitals in the United States, but I believe he is a Canadian citizen.

Because Margaret Murdoch (personal communication) had pointed out the reluctance of some of the SVEN informants to read a long passage, and because it seemed desirable that the second visit should be as undemanding as possible of the informant's time, RPI is only about 35% of the length of RPI.

3. Results and discussion

3.1 Comparison of SN and RPI (SVEN results)

The expected result was that the frequency of (MIT) Value #2 id/ would stratify as follows: SN>RPI>VA>WL>MC; that is, spontaneous narrative, reading passage, visual aural prompting, word list and minimal contrast (for an explanation of these terms see Gregg, this volume). Table 2 shows that only for six of the ten informants of the present study (1, 4, 6, 7, 8, and 10) is the SVEN frequency of Value #2 id/ higher for the spontaneous narrative than for the reading passage. For the remaining four informants (2, 3, 5, and 8) the spontaneous narrative results are lower than the reading passage results, though the differences between the two styles for informants 3 and 5 are less than 10%. For informants 2 and 8, however, the differences are substantial (20% and 23%, respectively), and must be borne in mind when we examine the results of the second interview.
Table 2: Percentage Voicing of Intervocal /l/ Across Speech Styles

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<th>#3 (218)</th>
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Note: Informants' original SVEN identification numbers in parentheses.

One of the problems with this comparison is the fact that while the reading passage is common to all informants, the spontaneous narratives differ not only in length—in the extreme cases by as much as a factor of two—but also in the specific lexical items in which (VTV) occurs, and, most importantly, as Table 3 shows, in the number of cases of (VTV):

Table 3: Cases of (VTV) Occurring in Informants' SNs

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It is quite possible, in fact, that the anomalous results of informants 5 and 8 are a consequence of the very few occurrences of (VTV) in their narratives.
3.2 Comparison of RPII and RPI

For none of the informants were the RPII and RPI results identical. This fact lends some support to the hypothesis that the nature of the reading passage affects reading style.

Figure 2: Comparison of the Two Reading Passages.
The bars indicate RPII% - RPI% for (VIV) Value #2 /d/ by informant.

The surprising result is that although RPII was designed to be more formal than RPI, it elicited what appears to be a slightly less formal speech. As striking as the unexpected direction of the variation between the two results is, the degree of agreement about this direction is even more striking, particularly when we recall the relative lack of such an agreement in the SVEN results for SN and RPI. While it is impossible to provide a reliable explanation without further testing, at least three possibilities deserve consideration.

First, perhaps RPII is, indeed, less formal than RPI, at least in the sense that "formal" is used in these kinds of investigations. Although this conclusion seems counter-intuitive, it certainly could be tested by having another group of informants read the two passages. If such a test confirmed that RPII is less formal, one could analyze the differences between the two passages to identify the characteristics that elicit a more formal reading style.

A second, even less plausible explanation is that RPII is indeed more formal, and that its formality would have made its results lower than those for RPI, but that in the three to five years between the first and second interview, some shift to increased voicing had taken place. Although this possibility is difficult to entertain very seriously, the results for the individual (VIV) items in the two passages were examined, on the grounds that a
slight sound shift might be detectable in this way. For only 2 of the 43 lexical items were the results for the two passages identical for all informants. For 17 items every change in RPII was a change to voicing, for 11 it was away from voicing, and for 13 both changes took place, but for different informants. Of the 17 uniform shifts to voicing, 7 involved at least 3 informants. The only substantial change away from voicing, made by 6 informants, was for the item later, and this can probably be ascribed to different sentence stress in the two reading passages.

A third possibility, and the one that seems most plausible, is that the entire second interview was perceived as a less formal context than was the first. Not only had the informants met the fieldworker before and completed a tape recorded interview, but the second interview was also extremely brief. In other words, the greater informality of the entire interview probably overrode the increased formality of the reading passage. Ironically, in planning this study one concern had been that the lack of a "warm-up" period in the briefer second interview might skew the results in the direction of formality.

3.3 Comparison of SN and RN

If the act of reading does itself introduce a degree of formality, then the (VtV) Value #2 /d/ results for the read narrative (RN) should be lower than those for the spontaneous narrative (SN). As Figure 3 shows, however, for only half of the informants (1, 2, 7, 9, and 10) do the results meet this expectation. Since the SVEN results for four of these five (1, 7, 9, and 10) also indicated that their reading style was more formal than their spontaneous-narrative style, we can conclude with some confidence that for them reading is, indeed, more formal.

But how are we to account for the fact that for four informants (4, 5, 6, and 8) the (VtV) Value #2 /d/ results for the reading passage version of the same narrative are higher than for the spoken version? These four informants share three characteristics not shared by any of the other informants:

1. Their RN results are extremely high. In fact, three of these informants have (VtV) Value #2 /d/ in all the test items (100%) and one has (VtV) Value #2 /d/ in all but one item (95%). These results suggest both that these particular informants are advanced in the shift to (VtV) Value #2 /d/ and that the second interview was perceived as less formal than the SVEN interview.

2. Their word list style results for SVEN are also higher, all of them being at least 30%, whereas the next highest result is 22%. This also suggests that these informants are more advanced than the others in the shift to (VtV) Value #2 /d/.

3. They have the four most rapid rates for reading RPII. This suggests that they are more fluent, less self-conscious readers, and so one might expect the act of reading to have less impact on their pronunciation.
3.4 Comparison of RPII and RN

The comparison of RPII and RN is, fortunately, independent of the factors that affect comparisons between the two interviews. One would, of course, expect RPII to be more formal and so to elicit less voicing than the read narrative. As Figure 4 indicates, this is, indeed, the case for all but three of the informants (2, 3, and 9), two of whom (2 and 3) also had an anomalous gradation between RPI and SN in SVEN. It is quite possible, also, that for some informants self-consciousness about reading their own narrative could make the task a more formal context than the reading of a more formal passage.
Figure 4: Comparison of the Read Narrative (RN) and the Second Reading Passage (RPII).

The bars indicate RN% - RPII% for (VIV) Value #2 /d/ by informant.

3.5 Range of reading styles

A comparison of the results for the reading styles elicited by RPI, RPII, and RN shows that for all ten informants the minimum difference between the highest and lowest result is 15% (see Figure 5); the mean difference is 23.4%. This suggests that reading style can encompass a rather wide band within a speaker's stylistic variation continuum.

Figure 5: Range of Variation within Reading Style.

The bars indicate the maximum difference between percentages of (VIV) Value #2 /d/ for any two reading passages by informant.
4. Conclusion

Although the results are less conclusive than one would have liked, they do confirm that the act of reading can have a marked effect on the speech produced, and that different reading passages can indeed elicit different reading styles. For only one informant did the results remain unchanged when he read a reading-passage version of his spontaneous narrative, and no informant had identical results for any two reading passages. The direction of the variations was sometimes surprising, however; for four informants the act of reading led to results that indicate decreased formality, and the results of all but one of the informants indicated that the more formal reading passage had elicited a less formal reading style. These anomalous results can probably be accounted for by the fact that the data compared were obtained in two interviews separated by three to five years; not only may there have been slight shifts toward increased voicing in the intervening time, but also it is probable that the entire second interview was perceived as a less formal context.

Appendix: Reading Passage II

Dr. Peter Brown, an eminent scholar and scientific writer, has been invited to address a meeting of Child Psychologists in Vancouver on Saturday. Dr. Brown graduated from a British university and has been working in hospitals in the United States, but I believe he is a Canadian citizen.

He will speak about an investigation of children’s eating habits that he has just concluded. His methods include putting video machines right in the home and recording whatever transpires during a meal. In examining parents’ strategies for getting their children to eat, he found that a lot of parents shouted if their children did not eat their vegetables, while others insisted on waiting until the children had eaten everything on their plates, and then congratulated them. He also observed that families that eat early seem to have fewer problems than those who eat their main meal later.

Dr. Brown has concluded that if a child dislikes a food right away when he is first introduced to it, it is probably futile to try to do anything about it. It is better, he claims, to put the child at ease during meals and to check that he will get all the needed nutrients from food he does like, such as potatoes, or even hamburgers, particularly if they are prepared with lettuce and tomatoes. He has noticed, however, that two out of three children are getting too much butter and salt, and not enough water in their diets.

Dr. Brown’s daughter has lived in Vancouver for several years, but I understand this will be his first visit to the city. It is unfortunate that he will not be able to see how beautiful it is, for Saturday evening he has to leave again for meetings in Montreal, Toronto, and Ottawa.
Spontaneous Speech in the Survey of Vancouver English: An Overview of the Analysis of Phonological, Syntactic and Lexical Variables

Erika Hasebe-Ludt

This paper provides an overview of the investigation of spontaneous speech sequences within the Survey of Vancouver English. It describes methods and procedures for handling the data, including computer coding and analysis. Preliminary results from the examination of phonological, syntactic and lexical variables are discussed and analyzed in comparison with data from the more formal speech styles investigated in the survey.

The influence of socio-economic group, age and gender on phonology, syntax and lexicon is examined, and emerging correlation patterns are outlined for this particular stage of the investigation.

1. Introduction

This paper will look at a number of major phonological, syntactic and lexical variables that occurred in spontaneous speech sequences within the Survey of Vancouver English (SVEN). In comparing selected variables from a body of computerized spontaneous speech data with corresponding variables from the more formal speech styles in SVEN, it can be hypothesized that, in this particular urban environment, factors of socio-economic class, age and gender interact with factors of speech style and speech situation to create a pattern of informal speech (Milroy 1987).

Within the constraints of a linguistic survey, this pattern comes as close as possible to resembling a speaker's everyday language behaviour—which is, according to Labov (1981), a major source of linguistic change. The analysis of spontaneous speech within the Survey of Vancouver English formed an integral part of the ongoing research in the social stratification of spoken Canadian English (Chambers and Hardwick 1986) as well as of other varieties of English (Trudgill 1974). SVEN data represented a speaker's actual performance in an informal everyday speech situation.

The first section of the paper will examine some major phonological variables that were elicited from a selected sample of computerized spontaneous speech, namely, the ending -ing; four types of medial t, (VtV), (ntV), (rtV), and (ntVn) + (rtVn); as well as the "Canadian diphthongs" (Hasebe-Ludt 1983). From a preliminary analysis of the data, certain trends in speech behaviour for this particular language environment could be observed in correlation with factors of age, gender and socio-economic status.
2. Techniques of spontaneous speech analysis

The actual body of data that constituted the speech style under consideration was elicited from section VIII of the SVEN Survey, the spontaneous narrative, in which the informants talked freely about some topic of personal interest or involvement—such as winning in the lottery, a memorable holiday or an accident they had been involved in. The amount of prompting from the interviewer was minimal, and the speech situation could be described as highly informal. The informants were relaxed and quickly forgot about the actual interview context, often telling lengthy stories and becoming involved in animated conversations with the interviewer.

Each of the spontaneous speech sequences was transcribed orthographically and phonetically at full length and was subsequently coded for the computer; tabulated lists of the relevant phonological, syntactic and lexical variables were then extracted with the help of the Oxford Concordance Program (Hockey and Marriott 1980).

3. Preliminary results of the analysis and comparison of phonological variables

At this stage of the investigation of the most informal speech style within the SVEN survey, the following trends in language behaviour could be observed: preferred variant choice in spontaneous speech varied to a large degree with socio-economic group and age and to a lesser degree with gender. For the variable medial /t/ (VV), for instance, both males and females of the older age groups showed some occurrences of the value [t], the voiceless variant, beside the most frequently chosen value [ð], whereas the younger group almost exclusively used the voiced feature.

Regarding socio-economic status, the members of Group IV, the highest group, had voiceless [t] in more instances than the members of the other three groups, indicating that high socio-economic status is linked with this particular pronunciation. It can also be noted that Groups II and III showed the most variability in their preferred pronunciations, especially with respect to the variable [ing] and the Canadian diphthongs, contrasting a noticeable trend towards uniform language behavior in the lowest and in the highest socio-economic groups. Groups II and III, for example, chose [In] as the preferred value of the variable [ing], but also had [ɪn] as a less frequent, though still noticeable pronunciation feature, whereas Groups I and IV were consistent in using [ɪn] exclusively.

Contrary to a common preconception about informal speech, [ɪn] seems to be a fairly consistent feature of this particular speech style and cannot necessarily be labelled +formal or +prestige. These results seem to contrast with the Ottawa Survey data which show [ɪn] as the overall preferred value for casual speech (Woods 1979). Unfortunately, the data from the Woods (1979) survey do not allow for an adequate comparison, as there is no breakdown into categories of age, gender and socio-economic status for the free speech section of the Ottawa Survey. Woods'
findings do correspond, however, with Gregg’s results for the non-spontaneous speech styles in SVEN, with [Ir] being predominant (Gregg, this volume; deWolf 1984).

As far as the Canadian diphthongs are concerned, a general movement towards consolidation of this particularly Canadian variable group seems to be confirmed for spontaneous speech, although the [au] value tends to be more stable than the [ei] value which, especially in the socio-economic middle groups (II and III) is supplemented by [at] as a second choice.

Spontaneous speech, a reflection of the language used every day in informal speech situations among friends and family, confirms the trend in language development towards a distinct social stratification within a particular speech community and points towards a characteristic variable pattern among speakers of different age groups. According to Labov (1981), this pattern of spontaneous speech is a major source of linguistic change. The pattern of phonological results for spontaneous speech in the Survey of Vancouver English remains to be corroborated through a further detailed analysis of syntactic and lexical items.

4. Syntactic variable usage in spontaneous speech

The following section discusses a selected number of syntactic variables that were investigated in the Survey of Vancouver English. Grammatical items in spontaneous speech (occurring in section III of the questionnaire, the spontaneous narrative, were contrasted with the answers to formal syntactic questioning in section IV and analysed with respect to age, gender and socio-economic status.

The focus of this discussion is a comparison of these variables in the two different sections of the survey and an analysis of the discrepancies and correspondences between the actual value of informal speech and the chosen value resulting from formal prompting and based on notions of grammatical correctness.

4.1 The variables

In section IV of the questionnaire, the formal grammar question section, syntactic variation was investigated in a non-continuous speech environment by prompting informants to respond to a number of sentences which say the same thing in different ways, asking them which one they think is most correct, whether they would also say it that way, which one they would use in an informal, relaxed situation (such as talking to some friends), or whether they would use something different altogether from the forms proposed.

A total of 44 questions present different ways of using each individual variable. The possible choices for each variable range from two (e.g. for real vs. really) to nine (e.g.
Every question always included the one variable form considered exclusively correct according to traditional grammar.

Instead of merely aiming at a direct response which shows the informants' own usage, this method of checking grammatical usage differs from other surveys by eliciting the speakers' perception and knowledge of what is considered to be the correct syntactic form as well as checking whether or not they apply these rules of grammatical correctness to their own speech (Gregg 1985).

The corresponding syntactic variables that occurred most frequently in the spontaneous, or continuous, speech style in section VIII of the questionnaire were of the following types: pronouns dealing with the special case forms, as in Mary is sitting between John and lime or just between you and me; forms of singular-plural agreement, such as there's/there are/there're, (e.g. There are eight eggs in the fridge) or where's/where're/where are (e.g. Where are my gloves?); and finally, items such as real vs. really in the adverbial function and anyway vs. anyways used as a syntactic device.

In order to extract the relevant syntactic variables, the Oxford Concordance Program proved to be helpful in compiling a list of the items for each individual informant. The correlation with age, gender and socio-economic status as well as cross-tabulations with the variables from section IV were achieved through the SPSS program (Statistical Package for the Social Sciences) in the same way as for the other sections of the SVEN questionnaire (Gregg, this volume, Hasebe-Ludt 1985b).

This discussion concentrates on selected grammatical items that point towards some interesting discrepancies and correspondences between spontaneous and formal speech styles.

In the formal grammar questioning of section IV, for the questions investigating special case forms of pronouns, namely nominative (or subjective) vs. accusative (or objective), 52% of the informants considered between you and me to be the correct form; the rest, almost half of the total number of informants, thought that between you and I was correct. Over 60% of all informants said they would always use the form that they judged to be correct.

Furthermore, we found a complete polarization between informants with post-secondary education (which we called the +PSE group) and those without (the -PSE group), in that the first group overwhelmingly opted for the traditionally correct between you and me, whereas the latter group scored 71% for the incorrect between you and I (Gregg, this volume). Reversing that tendency to polarization were the answers to the question in the grammar section in which the nominative form (as subject) was correct: only 1 to 2% of all informants considered It's me and Helen or Helen and me are ... to be correct.
The analysis of these variables in spontaneous speech leads to the conclusion that traditionally correct usage is linked with higher education and socio-economic status. The majority of +PSE speakers used the traditionally correct form in spontaneous speech--with the exception of a slight favouring of the incorrect *I* form by older speakers of the socio-economic middle groups II and III. In contrast, younger female speakers of the -PSE group seemed to prefer the correct *me*. The correct usage of the subject relationship in *Helen and I* is strongly confirmed throughout all groups and subgroups in spontaneous speech, with only one striking occurrence of *me*, and that was for a male, high status, middle age group speaker (+PSE Group IV): "I took a course which was ... wasn't really a course; it was just me and the prof."

In the area of singular-plural agreement, as in the sentences *Do you like these kinds/these kind of apples?* and *There's/there are apples on the table*, close to 80% of the total informant population (99% of the +PSE group and 75% of the -PSE group) considered *these kinds, there are, where are,* etc., to be correct and claimed that they exclusively used this form. The results from the spontaneous speech occurrences, however, modify this claim by showing a much higher percentage for the traditionally incorrect *these kind, there's/there is apples and where's/where is the apples* among speakers of the higher socio-economic groups (III and IV) than the formal prompting figures would suggest. More males than females use this non-prestigious variant of the variable in spontaneous speech, while speakers of the three age groups are represented fairly equally in this usage pattern.

The last two items to be discussed here point to some interesting developments in everyday language use in the case of *anyway versus anyways* (as in *Well, anyway/anyways, that's all over now*) and *really versus real* (as in *She's a real/really nice lady*). Here, the chosen variants of formal questioning do not correspond with the ones actually used in spontaneous speech: 86% of all informants claimed to use *anyway* and labelled *anyways* as incorrect and non-prestigious, whereas spontaneous speech results showed high occurrence (above 50%) for *anyways*. This specific variable could be clearly linked with age and gender, in that males of the younger age group were the predominant users of this stigmatized variant throughout all four socio-economic groups.

In the case of *really versus real* in the adverbial function, 31% considered the adjective form *real* to be correct, as opposed to 61% choosing the traditionally correct adverb *really* as the grammatically acceptable form. In spontaneous speech, *real* is mainly used by males--in socio-economic groups I and II, which incorporate the majority of -PSE speakers, and in the older and middle age groups.

### 4.2 Trend to simplification in syntactic variable choice

Syntactic variable choice in spontaneous speech, as compared to the premeditated
chosen variants of a more formal speech environment, shows the following trends: traditional grammatical standards are simplified (for example real, there’s) and hypercorrect forms (such as between you and I) do not occur in significant numbers, especially not within the younger age groups which are probably less aware of the controversy about this variable in traditional grammar.

In an overall pattern, age and socio-economic status, combined with educational level, seem to be more decisive factors in syntactic variable usage in spontaneous speech than gender combined with any of the other factors (cf. Labov 1990).

The above results point towards a modification of traditional grammatical standards in the form of a simplification process initiated by the younger age group and the speakers with lower socio-economic status.

It is hoped that a further and more detailed investigation of the full range of syntactic variability in spontaneous speech will confirm the above conclusions and subsequently lead to a more precise evaluation of the role that factors such as education, speakers' attitudes towards grammatical standards and the perception of their own linguistic competence play in determining so-called "prestige forms" (Gregg 1985).

The discrepancy between the awareness of what is traditionally considered to be correct and the actual use in informal speech of an "incorrect" variant leads to two conclusions: a speaker's choice of a particular variant depends on the speech environment and the linguistic self-image of a speaker does not necessarily coincide with the actual performance in a spontaneous speech situation (Labov 1970).

5. Gender as a determining factor in lexical variable choice

Characteristics of male vs. female speech seem to be an important factor influencing linguistic change (Labov 1990). Based on the data from free conversations elicited in the spontaneous narrative part of the questionnaire, this particular section of the paper examines the nature of lexical variable choice with respect to gender-specific use of language.

The purpose, then, is to examine whether, in the context of the Vancouver urban dialect survey, there is evidence of distinctions in the vocabulary of male and female informants (Eckert 1989). Selected lexical variables from SVEN's most informal speech style are used as data for the investigation.

5.1 Analysis and evaluation of the data: Shifts in local speech

The SVEN questionnaire was designed to elicit multiple speech styles that varied in their degree of formality, from most formal (word lists) to highly informal (spontaneous
narrative). The latter style, also called free speech, occurred throughout the interviews. This provided us with a large amount of data on lexical variables in a style of speech approximating the everyday, relaxed type of speech common among friends and family in an informal linguistic and social environment.

It is this particular kind of lexical data that seems best suited for investigating differences in the gender category of the sociolinguistic parameters (Lakoff 1977). Significantly, lexical variable choice was not prompted in this context—the informant chose the topic of conversation and consequently the pertinent lexical variables. Yet, a certain conformity between the individual speakers’ vocabularies existed, allowing comparisons to be made, because the interviewer suggested a loose framework of topics. The elicited casual narrative—either in the form of monologue or dialogue—represents a type of language use that closely resembles the actual everyday language behaviour of the informants.

In this day and age of egalitarian language change and the accompanying controversy that surfaces around this phenomenon (Landsberg 1986), it seems especially important to examine the factual usage of language as a tool for sociological trend-setting in the vocabularies of men and women of different age groups and socio-economic status.² The purpose of this discussion, then, is to examine the data from the survey for evidence of differences in the lexicon of the two genders, and to conclude whether or not, in the linguistic context of urban Canadian English, such language performance can be labelled gender-specific.³ The categorization of the 300 informants involved an even division into the two gender groups, three age groups and four socio-economic classes.

An attempt was made to concentrate on lexical items that would correspond with those variables elicited in other sections of the questionnaire, such as in section II (Visual-Aural Prompting) and section V (Local Words), in order to add a further dimension for comparison—the level of styles of speech. Variables that were investigated in these formal sections include words that have some kind of domestic reference, in particular pertaining to parts of the house and its furnishings or surroundings such as carpet/rug, verandah/porch, sofa/chesterfield/couch, mow law/cut grass, etc.

Also, in section V, questions were asked that “investigate the survival, currency, and semantic interpretation of a small set of local lexical items which belong on the Canadian West Coast and which should be—we hoped—known and used by many Vancouverites” (Gregg, this volume, page 67). These items would therefore not be found in any Canadian urban centre outside of British Columbia.

Words such as saltchuck, skookum, siwash, Squamish, oolichan, and others would have lent themselves to an interesting comparison of semantic interpretation in the vocabulary of male and female informants in the different speech styles—one strictly prompted through direct questioning (What does this word mean? Have you ever
heard it? Have you used it yourself?), the other one completely unreflected. However, these lexical items were not incorporated in the informants' spontaneous speech often enough to warrant meaningful analysis in terms of a percentage occurrence.

A possible explanation for this low rate of occurrence is the highly specialized and localized usage of these variables that are predominantly rooted in Chinook Jargon. At one time, this pidgin was a widely-used contact language between Aboriginal people and white traders and settlers. It is evident from the detailed analysis of these lexical items in the formal questioning that terms such as saltchuck, skookum, etc., are predominantly used and known by older male informants. These words may reflect a male-oriented pioneer society that today is becoming more and more obsolete and removed from the reality of spontaneous everyday speech (Gregg 1983).

In the formal questioning about the local words, more males than females knew these words: on average, 80% of the men vs. 30% of the women used these terms. The fact that highly any of these terms occurred during spontaneous speech leads to the conclusion that the distinct labelling of these lexical variables as male, together with their specialized semantic origin, did not permit their extensive incorporation into the everyday informal vocabulary of our informant population.

When the age parameter was included in the analysis, a significant decrease in knowledge about and usage of these local words among the younger age group for both males and females was obvious, but in particular for the young female informants. Generally, there seems to be no evidence of a persisting gender-specific use of language for this specific semantic cluster in spontaneous speech, which can surely be attributed to a changing lifestyle for both males and females in contemporary society.

The data elicited from spontaneous speech with respect to more widely-distributed lexical items, particularly those with a domestic reference, are more amenable to statistical quantification. For the purposes of this paper, the discussion of male vs. female differences in lexical variable choice concentrates on a few examples that show the overall pattern for spontaneous speech throughout the survey. The variables that occurred most frequently in the course of informal speech situations related to the domestic environment were, for example, house/home, apartment/suite/condominium etc., dinner/supper, mow lawn/cut grass.

With respect to this lexical set, the female informants, especially in the older age group, used terms that could be labelled prestige more frequently than the male speakers. One example which demonstrates this quite clearly is the usage of dinner vs. supper. About 80% of the females used dinner exclusively when talking about a special meal, such as Thanksgiving, Christmas or New Year's dinner, in a special setting or at an exclusive restaurant. On the other hand, male speakers did not have this strong distinction between the two terms and used either dinner or supper for both an elaborate and simple culinary occasion without any particular pattern of semantic
preference based on prestige.

The same phenomenon occurred with home vs. house and condominium vs. apartment: women more often used home and condominium, attaching a prestigious label to these referents, whereas men tended to refer to houses and self-owned apartments, using a more neutral terminology. In most cases, female informants modified the prestigious terms with adjectives of the same kind, such as "a really beautiful home," "a nice little condominium." These and other items (mow lawn/cut grass, for example) seem to indicate gender-specific labelling with respect to the values of +prestige and -prestige in spontaneous speech. It can therefore be stated that from a linguistic point of view female speakers show an overall higher percentage of semantic differentiation as far as the investigated data are concerned.

6. Summary and conclusion

In comparing phonological, syntactic and lexical variation in spontaneous speech data in SVEN, it is obvious that factors of socio-economic group, age and gender all play decisive roles in varying degrees.

For the phonological and syntactic variables, socio-economic group seems to be the dominant factor in combination with age, with the latter factor being slightly more influential in determining syntactic variable choice. For phonological and syntactic variables, gender takes third place. With respect to lexical variable choice, gender-specific patterns seem to emerge, linked with age-specific factors, for variables that could be labelled +/- prestige. A further in-depth statistical analysis of the discussed areas of investigation is needed in order to test the above preliminary analyses of the spontaneous speech data.

This paper is an expanded and revised version of three conference papers (Hasebe-Ludt 1984, 1985a, 1986) presented at (in order) the Eighty-Second Annual Meeting of the Philological Association of the Pacific Coast, Vancouver, B.C.; Joint Annual Meeting of the Linguistic Society of America and the American Dialect Society, Seattle, Washington; Eighty-Fourth Annual Meeting of the Philological Association of the Pacific Coast, University of California, Riverside.

1 The (ing) variable occurs in words such as working (verbal), everything (pronoun) and morning (nominal); examples of the various types of medial are matter (VIV), winter (nINV), party (nIV), eaten (VIVn), mountain (nINV) and certain (nVn); the two "Canadian diphthongs" [ui] and [oi] are found, for example, in house and nice.

2 Landberg's 1966 article discusses, for example, a nonsexist Style Manual proposed for use by the Scarborough Board of Education.

3 In order to extract the relevant data from the recorded interviews, the SPSS computer program was used in conjunction with the Oxford Concordance Program. For a more detailed discussion of the computer analysis of the data, see Hasebe-Ludt (1983, 1985b) and de Wolf (1981).
The Survey of Vancouver English: Attitudes and Awareness

D.J. Richards

The socio-linguistic model that includes emulation of a prestige form as a motivator for language variation and change assumes vitality of language attitudes in the establishment, identification and function of prestige forms. A simple but operative definition of language attitudes, one which provides an elementary understanding of the importance of language attitudes to language variation and change, is a person's disposition toward or feeling about different languages, dialects, styles and variants: speakers' language attitudes, however conscious or unconscious they may be, prompt the speaker to reject or accept, to avoid or to emulate various forms, styles or dialects.

1. Introduction

1.1 Language attitudes in sociolinguistic research

Various studies of language attitudes have been undertaken since Labov conducted his seminal work on variation in New York City in 1966. The methods used in the studies have varied not only with the purpose of the study but also with the development and refinement of sociolinguistic methodology and language attitude research. Studies can, perhaps, best be grouped according to their purposes, which include documenting the existence of and identifying language attitudes, investigating the role of language attitudes in linguistic matters and in social matters. The most common methods of documenting language attitudes include the use of questionnaires, subjective reaction tests and the matched guise technique.

The questionnaire employing rating scales is the simplest means of amassing a body of data. However, the nature of language attitudes makes the use of questionnaire and interview limited for language attitudes studies, especially those whose purpose goes beyond identification of attitudes. As Labov (1966: 406) points out, "In order to measure the internal evaluation process of our respondents, we must construct a chain of inference which leads to a quantitative measure of overt behaviour." To better assess language attitudes, he developed a "subjective reaction test" in which respondents listen to paragraphs containing marked variables and, imagining themselves to be personnel managers, identify which jobs the speaker could hold. This method does indicate attitudes toward language varieties, but it does not quantify the particular variables to which the respondents react.
The matched guise technique, developed by Lambert 1972 (see Tucker and Lambert 1973, d'Anglejan and Tucker 1973, Carranza and Ryan 1975, Day 1982) employs tapes of people with different dialects or accents reading the same passage; at least one of the speakers adopts more than one accent or dialect so that, unbeknownst to the listeners, at least two of the tapes they hear are of the same speaker using a different accent. The respondents listen to the tapes and attribute particular traits such as friendliness, sensitivity and dependability to the speakers and decide whether or not the speakers could attain success. This technique, though perhaps the most useful, is oversimplified as it measures attitudes without considering the strength of the attitudes or the congruity of topic, speaker and language variety. Fishman's (1968) "commitment measure" is a means of testing the strength of the attitudes by measuring the respondent's willingness to perform a particular type of action related to the attitude; for example, if a person has evaluated Spanish positively, he or she may be asked to agree to attend a Spanish cultural evening. Kimple's (1968) "mirror-image" technique tests the congruity of topic, speaker and variety by using tapes which preserve role-relations, setting and topic but change the language; because Kimple has shown that speakers do have a systematic notion of appropriateness with respect to topic, relation and setting, aspects of his technique should be included in tests of language attitudes. Each of the methods has some weakness and some strength; for thorough study of language attitudes, a combination of the methods used would be ideal. However, before undertaking such extensive and expensive studies, it is wise to establish the existence and possible peculiarities of language attitudes in the area under consideration. To this end, the use of a single questionnaire, especially when accompanied by an interview, is adequate. Often, such an assessment of language attitudes is a part of a larger sociolinguistic survey such as those done by Labov (1966) Lambert (1972), Trudgill (1974), Woods (1979) and Gregg (this volume).

1.2 The Vancouver Survey

In an effort to elicit responses that could at some time be compared with those of Woods' Ottawa Survey, the Gregg team added section XI, "Subjective Attitudes and Language Awareness" to the Survey of Vancouver English after the pilot project had been completed. This section, then, can be considered as a pilot project and used to probe the advisability of further, more direct study of language attitudes in the Vancouver area. To that end, the responses are divided into two categories, one dealing with language awareness, the other with language attitudes. A third category, one which treats a question that clearly assesses both attitudes and awareness, is added. Each category is then analyzed by simple frequency, after which the effect of social factors, gender, age and socio-economic status is considered. Some consideration is then given to problems with this pilot project and recommendations are made for future study.
1.3 *Attitude and awareness questions in SVEN*

The first ten questions asked in section XI of SVEN can be divided into two groups—language awareness and language attitudes. The questions that assess language awareness are the following:

1044. Can you recognize Americans from their speech?
1045. Can Americans tell from your speech that you're Canadian?
1046. Have you changed your own pronunciation of any words over the years?
1043. Apart from the Maritimes and Newfoundland, can you tell where English-speaking Canadians come from just by listening to them talk?
1042. Do you think Vancouver people speak differently from Victoria people?

The first question that assesses language attitudes is:

1047. How do you feel about your own speech?

The responses to this question were recorded on a five point rating scale ranging from very dissatisfied to very satisfied. The remaining assessment of language attitudes also employed five point language rating scales; however, statements were made and the respondents rated their level of agreement with the statements from strongly agree through moderately agree, neutral and moderately disagree to strongly disagree. These statements are as follows:

1048. A British accent is more pleasant to listen to than an American accent.
1051. Since the American spelling of some words is much more reasonable than the British, Canadians should use the American rather than the British spelling of these words.
1050. The language of CBC announcers should be the standard for spoken Canadian English.
1049. A native-born Canadian speaking with an accent which is more like a British than an American accent is obviously affected.

An eleventh question assesses both attitudes and awareness. Though primarily an assessment of attitudes, question 1052 must also be considered an assessment of awareness:

1052. It makes no sense to speak of a uniquely Canadian English differing from
both "American English" and "British English."

These eleven questions, with their qualifications and explanations, make up the attitudes and awareness section of SVEN.

2. Frequencies

2.1 Language awareness

1044. Can you recognize Americans from their speech?

The responses to this question were more uniform and positive than those to any other question in section XI. Of the informants, 91% claimed to recognize Americans from their speech. Such a strong response indicates that the informants have more of a sense of distinction from Americans than popular opinion about the domination of Canadians by Americans would suggest. Clearly the majority of the informants are aware of speech differences between the two groups.

1045. Can Americans recognize Canadians by their speech?

Although the positive responses to this question were the second highest in this section, considerably fewer of the informants thought Americans are as aware of speech differences as Canadians are. Of the informants, 70% thought that Americans recognize Canadians by their speech. The difference in rate of positive response between questions 1044 and 1045 may indicate that, though Canadians are less dominated by Americans than they have been led to believe, they do think that Americans are less aware of the differences between Canadian and American English than Canadians are.

1043. Can you recognize other Canadians by their speech?

Of the respondents, 67% claim that they recognize people from other parts of Canada by their speech. The most common recognition, however, was by large region rather than by small area and most informants seem to have identified a regional variety by their familiarity with a person or small group of people from that area. For example, one informant said he could recognize people from Saskatchewan because his uncle was from there and he talked differently from the way British Columbians do. Although the informant was making a rather gross over-generalization, as people tend to do, his observation that his uncle speaks differently is most likely correct and the over-generalization likely to be based on the valid observation. The point is that people do recognize differences of speech within Canada.

1042. Do people from Vancouver speak differently from people from Victoria?
With this introduction of speech variety within a smaller area, the pattern of positive response to the question breaks down considerably. Only 37% of the informants responded positively to this question; 13% did not know and 50% said that there is no difference. Of the informants, 2% thought that there once was a difference but that it no longer exists; a further 3% thought that there is a difference among older people and older families, identifying the colonial influence in Victoria. It could be that those informants who think there was a difference or that it exists but only among older speakers responded by expectation rather than through perception and awareness. Rather than being aware of and hearing differences between the speech of people from Vancouver and people from Victoria, they think there should be a difference, especially among older speakers or in the past, because of the different settlement patterns and histories of the two cities. This question, then, seems to indicate expectation rather than actual awareness of differences between the two British Columbian urban centres.

1046. Have you changed your own pronunciation of any words over the years?

The informants again showed a fairly strong positive response to this question: 67% claimed to have changed their pronunciation; 31% claimed they have not; 2% did not know. The most common reasons given for changing were to try to be correct or to improve (31%), to imitate (19%) and to match common Canadian usage (12%), reasons which indicate an awareness of not only regional varieties but also social or normative varieties. In conjunction with people’s identifying differences among older speakers from Victoria and in the past, people’s identifying change in their own pronunciation indicates that, on some level, the informants are aware both of change over time and of variation at a common time.

We see, then, a high level of awareness of national varieties, awareness of large regional varieties, expectation (at least) of variation between urban centres and awareness of change in the speech of individuals. There is also evidence of awareness of social varieties as indicated by the reasons people gave for changing their own pronunciation.

2.2 Language attitudes

1047. Are you satisfied with your own speech?

Combining the "strongly ..." and "moderately ..." categories of responses shows that 60% of the informants claimed to be satisfied with their own speech; 32% were neutral and 9% were dissatisfied (see Figure 1). The use of rating scales as assessment tools results in some patterns that are caused by the scales themselves. In general, responses cluster around the central, neutral category on the scale, and people tend to respond positively rather than negatively. The responses to this question assessing people’s attitudes to their own speech follow the general pattern associated with rating scales, as one can see from Figure 1. However, the pattern cannot be said to be wholly
a result of the scale itself rather than of the particular question asked, as will be seen from deviances from the pattern in other questions. Self-assessment is also problematic because people are seldom accurate judges of their own behaviour as Labov's (1966: 455-481) test of linguistic insecurity seems to have shown. Furthermore, considering that 67% of the informants claim to have changed their own pronunciation and that the reasons many of them gave for changing were that they desired to be correct or to conform, one would expect a lower rate of self-satisfaction than 60%. It could be that informants considered that their changes had been successful. Perhaps the importance of the responses to this question is that only 9% of the informants claim to be dissatisfied with their own speech, a figure which does not indicate the level of insecurity and inferiority that the media project for Canadians.²

Figure 1. Attitudes: Clustered

1048. A British accent is more pleasant to listen to than an American accent.

Again, 60% of the informants agreed with this statement; however, as Figure 1 shows, 16% disagreed and 25% were neutral. The responses to this question confirm what Canadian linguists (for example, Scargill and Warkentyne 1972) have stated for some time now, i.e., that Canadians rank British English above American. However, the statement does not assess people's attitudes toward Canadian English; hence whether or not Canadian English is ranked between the two, as linguists claim, cannot be confirmed by this question.

1051. Canadians should adopt American spelling.

The response to this statement is much stronger than it seems at a glance (see Figure 2). Of the informants, 52% disagreed, 22% were neutral and 26% agreed. However, the pattern of clustering around the neutral category of rating scales is clearly broken in
the responses to this question. Of the 52% who disagreed with adopting American spelling, 41% strongly disagreed and only 11% moderately disagreed. Similarly the positive responses include more strong than moderate agreement with 16% strongly agreeing and only 10% moderately agreeing.

As Figures 1 and 2, which graph the responses of each of the rating scale questions, show, the responses to the question assessing the desirability of adopting American spelling do not follow the general trend toward neutrality.

Figure 2. Attitudes: Not Clustered

![Graph showing frequency-percentage of responses to attitudes towards American spelling]

Clearly respondents have strong opinions, whether positive or negative, about adopting American spelling. The fact that the question was worded in practical terms (i.e. "Since the American spelling of some words is much more reasonable than the British, ...") is further indication of the strength of the response; informants put their preferences for British over American before possible practical value of American spelling. Both the rating scale trends—clustering in neutral categories and provoking more positive than negative responses—are broken in the responses to the advisability of adopting American spelling; hence we see that the responses to this question are important. People clearly prefer the British model to the American despite practical concerns.

The responses to two other attitude questions are problematic: careful consideration of the results indicates that these two reveal more about survey methodology than about attitudes toward language. Detailed consideration of the problems must be undertaken elsewhere; here only the results themselves will be presented.

1049. A native-born Canadian speaking with an accent which is more like a British than an American accent is obviously affected.
As Figure 1 shows, there is little indicated by the responses to this question; 39% disagreed, 36% agreed and 25% were neutral. Of those who disagreed, 18% moderately disagreed and 22% strongly disagreed, suggesting some possible trend there, a trend which is predictable if one expects the preference for British over American that is indicated by the responses to the other questions to be reflected in evaluation of the accents Canadians should adopt. However, it seems that the question is simply too vague to evoke an immediate response; many informants seemed not to know what "is affected" signifies.\textsuperscript{4} Thus nothing other than speculation and recommendation for future studies can be concluded from the question.

1050. The language of CBC announcers should be the standard for spoken Canadian English.

This question also raises problems. Although 42% of the informants agreed with this statement and 33% disagreed (with 25% being neutral as is shown in Figure 2), exactly what they agreed or disagreed with is not clear. The question is ambiguous; some informants took it to mean that Canadians should adopt the language of the CBC announcers as standard Canadian, and others took it to mean that the CBC should consciously and intentionally provide a standard, if not impose a standard on Canadians. Furthermore, other parts of the survey indicate that it is unclear just how many people are familiar with the language of the CBC announcers;\textsuperscript{5} hence, the question is weak on two counts. The most that can be concluded is that there is some indication that Canadians may look for a standard, presumably within Canada.

The frequencies in the language attitudes section of the questionnaire thus reveal only that 60% of the informants are satisfied with their own speech; 60% think a British accent is more pleasant to listen to than an American accent; and 52% disagree strongly with the idea of adopting American spelling. Thus, these three questions in SVEN support the general view that Canadians value British English more highly than they do American English.

2.3 Language awareness and attitudes

The final question to be considered here is that which deals with both language awareness and language attitudes.

1052. It makes no sense to speak of a uniquely Canadian English, differing from both "American English" and "British English."

Of the informants, 68% disagreed with this statement, 14% were neutral and 28% agreed. Again, the responses are even stronger than they initially appear to be because the usual pattern evident in rating scales (clustering and avoiding the negative) is clearly broken here. As Figure 3 shows, of those who disagreed, almost 39% did so strongly and only 19% did so moderately. Similarly, of those who agreed, 18% did so
strongly and only 10% did so moderately. Because the question was worded negatively, the respondents who thought there is a "uniquely Canadian English" had to respond negatively. We see, then, that the response to the statement is stronger than it first appears.

Figure 3. 1052 (No Canadian English)

The two aspects of the question--awareness and attitudes--must be considered separately, each in relation to the other questions of the pertinent section. The question reflects awareness as well as attitudes because the respondents are required to argue for the existence of, rather than to evaluate, something that might be called "Canadian English" as opposed to "British" or "American English." The frequencies of the responses to most other awareness questions were much higher and seem more important than the 68% response to Canadian English (91% recognized Americans; 70% thought Americans recognize Canadians; 67% were aware of changes in their own pronunciation; 67% recognized other Canadians by their speech). One would think that the response to Canadian English would be much higher, especially in light of the fact that respondents clearly distinguish American English, presumably from Canadian English. These results, however, are likely to have been affected by the negative wording of the question, by the order in which the questions were asked and by the overlap between attitude assessment and awareness evaluation in the question itself. Still, despite the methodological weakness, there is some indication here that Canadians are aware of a distinct variety that is their own.

Considering question 1052 as an assessment of attitudes rather than awareness is a little more conclusive. The results of the question assessing the existence of a variety of English that could be called Canadian are statistically comparable to those which assess the informants' own speech, the desirability of adopting American spelling and the relative pleasantness of a British or American accent. Of the informants, 58% thought there is something that could be called Canadian; 60% agreed that British is
more pleasant to listen to than American English, and the same percentage did not think that they should adopt American spelling. Just as the responses to the question concerning American spelling break the rating scale pattern and polarize rather than cluster around the central, neutral category, so do the responses to the Canadian English question, with 38% strongly disagreeing as opposed to only 19% moderately disagreeing and with 18% strongly agreeing (that there is no Canadian English) as opposed to only 10% moderately agreeing (see Figures 1, 2 & 3). The reaction, then, is stronger than appears at first glance and is very similar to the reaction to questions 1047, 1048 and 1051.

We see, then, despite some difficulties with the study, that Canadians are aware of varieties of English, especially national and gross regional varieties rather than urban varieties, that they do think there is something that could be called Canadian English, that they are satisfied with their own speech, that they think British is more pleasant to listen to than American English, and that they do not think they should adopt American spelling. Though the rate of agreement ranges through these questions from 91% to 52%, clearly the informants are aware of and do feel strongly about variation.

3. The effect of social factors on language awareness

To determine whether or not the awareness and attitudes of the informants are affected or determined by standard social factors (age, gender and socio-economic status), as was the case in the Labov study and seems to be the case in the usage section of the Survey of Vancouver English, I analyzed each of the questions in section XI SVEN using cross-tabulations of the three social factors.

3.1 Gender

Although gender does not affect responses to most questions of awareness, it does seem to be a factor in three of the questions—1042 (Vancouver vs. Victoria speech), 1043 (other Canadian dialects) and 1046 (changed own pronunciation). Of the men surveyed, 41% thought there is a distinction between Vancouver and Victoria speech whereas only 33% of the women surveyed made the same distinction. Similarly, 70% of the men claimed to have changed their pronunciation whereas only 64% of the women made the same claim. One cannot conclude that men are more linguistically aware than women on the basis of two questions, especially not when the findings are reversed for another. Among the women, 70% claimed to distinguish other Canadian dialects whereas only 65% of the men made the same claim. These differences, which are minor, are neither predictable nor explainable. There are no grounds on which to postulate a connection between gender and linguistic awareness either in the abstract or from the analysis of these questions. Figure 4 presents a summary of the positive responses to the awareness questions analyzed by gender; it shows there is little if any effect attributed to gender on linguistic awareness, nor should we expect there to be any.

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3.2 Age

Figure 5 is a summary of the positive responses to awareness questions cross-tabulated by age. It shows that age affects awareness more than gender does.

Figure 5. Awareness by Age

Age is particularly important to the responses regarding Vancouver and Victoria speech differences. Given that several informants qualify their positive responses with
comments such as "only among older speakers" and "formerly," it appears likely that age would affect the responses. Of the middle age group, 44% distinguished between the speech of the two cities; 42% of the oldest age group made the same distinction; only 25% of the youngest group thought there is a difference. Predictably, members of the oldest group were the most likely to qualify their answers in an age or time-related way.

Age is also important to the responses to question 1043 (other Canadian speech). Of the youngest group, 79% claimed to be able to recognize other Canadians by their speech; 70% of the middle age group made the same distinction; only 53% of the oldest group made such a distinction. Figure 5 graphs the cross-tabulation of question 1043 by age, after the positive responses were collapsed into an unqualified "yes" category. As the figure shows, age is important and the responses are stratified by age with the rate of distinction decreasing as age increases.

The oldest age group also has the lowest rate of positive response to question 1044, which asks if informants can identify Americans by their speech. As Figure 5 shows, though the rate of effect of age on this question is lower than on the other awareness questions, these responses are also stratified by age: 96% of the youngest group claimed to be able to identify Americans by their speech; 93% of the middle group made the same claim; only 84% of the oldest group made the same identification.

Both the stratification and the tendency for the oldest speakers to have the lowest rate of agreement disappears for the question assessing whether or not Americans can identify Canadians by their speech (1045). As Figure 5 shows, the youngest group had the lowest rate of agreement with this question; 76% of the middle group thought Americans can identify Canadians by their speech; 67% of the oldest group agreed as did 66% of the youngest group. The relative importance of age to the question also decreases, as it does with the responses to the other question concerning awareness. Age is scarcely a factor in the informants' being aware of changing their own pronunciation over the years (1046). As Figure 5 shows, the complete range of difference by age is 4% with two of the rates, those of the middle and old groups, being in the same percentage.

It seems, then, that though age is important to some extent to the questions of awareness, there is no consistent pattern. Even if the very slight difference between the middle and oldest groups in question 1046 is included in a summary of the cross-tabulations by age, any pattern is weak. Three questions (1043, 1044 and 1046) are stratified by age with the youngest having the highest rate of agreement. Two questions (1042 and 1045) have the middle age group with the highest rate of agreement followed by the oldest then the youngest group. The closest thing to a pattern here is that the oldest group most often has the lowest rate of agreement, with questions 1042 (Vancouver-Victoria distinction) and 1045 (Americans identify Canadians) being the exceptions. Both of these exceptions may be accounted for by the fact that more of the oldest group are affiliated with Britain than is true of either of
the other two groups. Hence the question may be as much one of national or political loyalty or familiarity as it is simply of age. Unfortunately, because informants were chosen primarily to ensure Canadian usage and attitudes were being assessed, the possibility of analyzing the data by national allegiance other than Canadian is eliminated. Hence my suspicions that national loyalty is either as important as or more important than age cannot be tested using this database. However, we do see here that age (or something masked by age) is of some importance to the questions of awareness.

3.3 Socio-economic status

Of the three social factors, socio-economic status seems to be the most important, but again there is very little pattern in the group of responses. Figure 6, which summarizes the cross-tabulation of the positive responses to the awareness questions by socio-economic status, shows that there is a clear break between the highest socio-economic group and the other three groups in the responses to question 1042 which asks about differences between Vancouver and Victoria speech: 51% of the class IV informants identified a distinction but only 30% of the class III, 34% of the class II and 33% of the class I informants made the same distinction. Considerably more of the highest class than of each of the other classes are aware of a distinction between the speech of people from Victoria and people from Vancouver.

Figure 6. Awareness by Socio-economic Status

Although socio-economic status is also important to the identification of something that could be called Canadian English (question 1052), the pattern is different. Of the class III respondents, 68% argued for Canadian English; 67% of the class IV respondents made the same claim; only 50% of the class II respondents and 45% of the class I
respondents agreed with them. Here, then, the break is between the lower two and the upper two classes. There is a similar break in the analysis (see Figure 6) of responses to question 1043 (identify other Canadians by their speech) and 1046 (changed own pronunciation); however, there is also some stratification in the analysis of these two questions. Of the highest socio-economic group, 77% claimed to identify other Canadians by their speech; 73% of class III, 62% of class II and 58% of class I speakers made the same claim. Similarly, 80% of the highest socio-economic group claimed to have changed their own pronunciation; 70% of the class II group, 64% of the class II group and 58% of the class I group made the same claim. Here the break is much less clear than the break in the other questions and the pattern of stratification is more important than any break between classes. Keeping in mind that the question is a self-assessment as well as an awareness assessment and that the reasons given for change indicate a desire for improvement and correctness, we can consider the pattern of stratification to be a possible indication of the weight of attitudes rather than awareness in the question.

For both questions concerning recognition of people from another country (1044--Can you recognize Americans from their speech? and 1045--Can Americans recognize Canadians from their speech?) socio-economic status is less important than for the other awareness questions and what little pattern there seems to be among the other questions disappears completely. Thus, 78% of the lowest socio-economic group claimed that Americans can identify Canadians from their speech; 74% of the highest group made the same claim, as did 67% of the third group, and 62% of the second. Here, the two extreme socio-economic groups have the nearest rate of agreement of the lot. The analysis of the responses to the question assessing Canadians' recognition of American speech shows that socio-economic status is not important at all; 92% of the higher two groups claimed to identify American speech, and 90% of the lower two groups made the same claim. Thus, we see that, though socio-economic status is a factor in some of the responses to awareness questions, there is no clear pattern or trend.

In general the analysis of the awareness questions by social factors is, not surprisingly, inconclusive. Gender seems not to be a factor for the most part, and the few indications of importance are not patterned; age is usually a factor, though not clearly patterned, and socio-economic status is also a factor but not patterned.

4. The effect of social factors on language attitudes

If Labov's work and theory are sound, then it is likely that the social factors will be more influential on and more patterned for the questions concerning language attitudes.
4.1 Gender

Gender seems influential on three of the six attitude questions and, in all but one of those three responses, more women than men responded positively. Of the women, 63% claimed to be satisfied with their own speech (1047), whereas only 56% of the men claimed satisfaction. In response to the question concerning the CBC, more women responded positively than men: 48% of the women surveyed agreed that the language of the CBC announcers should be standard, but only 37% of the men agreed. Whatever the reasons for gender to affect people’s responses to assessments of their own speech and that of the CBC announcers, women are more satisfied with their own speech and more likely to agree that CBC English should be a standard for Canadians than men are.

Whatever pattern there is to the relationship between gender and language attitudes ends with those two questions, however (see Figure 7). Although there seems to be gender influence in the responses to the question regarding affectation of a British accent, the pattern found in other responses is inverted: more men (41%) than women (31%) thought that a Canadian speaking with an accent that is more British than American is affected. Again, the reason for such a connection is unclear but, as shown above in the analysis of frequencies for the assessment of Canadians speaking with British accents (1049), the question is also unclear.

Figure 7. Attitudes by Gender

Gender is not influential in the analyses of attitudes toward British English (1048—A British accent is more pleasant to listen to than an American accent), toward the adoption of American spelling (1051) or toward a dialect that could be called Canadian English (1052).
These analyses reveal, then, that no conclusion can be drawn about patterns of the influence of gender on attitude questions. In this study, the influence of gender on language attitudes is itself questionable both because gender is not consistently influential and because there is no clear explanation for what appears to be gender influence. One possibility suggested by the SVEN database is that familiarity is likely to be a factor that may be masked as gender: cross-tabulating the questions regarding radio listening and television viewing (see endnote 5) reveals that although the same percentage of men as women listen to the radio as background music, considerably more women (65%) than men (35%) listen to talk programs, especially on the CBC. Of the women, 61% listen to the CBC as compared to only 39% of the men; hence more women than men are familiar with the language of the CBC announcers and are, therefore, more likely to have attitudes toward their language. The database indicates, then, that careful and more specific assessment of what seems to be an effect of gender on language attitudes is needed.

4.2 Age

Age is more influential on attitudes than gender is but is also unpatterned. Age affects the responses to five of the seven questions heavily, one of the questions slightly and does not affect the responses to one of the questions at all. The responses to the desirability of the language of the CBC announcers being standard for Canadians (1050) are stratified by age; 33% of the youngest group, 44% of the middle group and 51% of the oldest group agreed that CBC language should be standard.

The middle age group showed the highest rate of satisfaction with with their own speech (1047); 65% of the middle age group, 59% of the old group and 55% of the young group claimed to be satisfied with their own speech (see Figure 8). If one assumes that there is a connection between satisfaction with one’s own speech and change and that changes are often motivated or implemented by the young, then it is predictable that the young group would have the lowest rate of satisfaction with their own speech, as is the case here.

Figure 8. Attitudes by Age
The middle age group has the lowest rate of agreement with the statement that a British accent is more pleasant to listen to than an American accent (1048). Only 49% of the middle age group responded positively to the question, whereas 66% of the old group and 64% of the young group valued British English over American English (see Figure 8). A reason for the low figure for the middle age group is unclear. It is also unclear why there would be a direct connection between age and attitudes toward dialects of English; the influential factor here could be national allegiance rather than age and thus what this seeming age influence may reflect is national allegiance rather than pure age.

Unfortunately, national loyalty can be checked only very roughly using the data because, though informants were controlled for age, the Canadian focus of the study resulted in there being more third generation Canadian informants than either first or second (43% third, 26% second, and 24% first generation). There is fairly even distribution of young, middle and old informants within the sets of those who are first, second and third generation in Canada; however, there is some evidence that, as expected, as age increases the number of third generation Canadians decreases (44% young, 44% middle, 40% old) and the number of first generation Canadians increases (13% young, 25% middle, 35% old). Cross-tabulating the responses to question 1048 (British accent more pleasant) by age and controlling for generation Canadian shows that there is some influence of generation Canadian within the age division; the general decrease in the rate of the middle age group is not evident when looking only at first generation Canadians; of the middle age group who are first generation Canadians, 65% agreed that British English is more pleasant to listen to than American English compared with only 61% of the old and 50% of the young first generation Canadians.

This contrasts the pattern of the middle age group: middle-aged informants are the least likely to evaluate British English accents above American, which holds for both those born in Canada and for second and third generation Canadians. Again, however, a possible reason for such irregularity is unclear unless the connection involves ethnic identification. As expected, as the age increases, the percentage of the informants who consider their ethnic identity to be Canadian decreases; 40% of the young people claimed to be Canadian; 39% of the middle group made the same claim; and 33% of the old group agreed. There was, however, a tremendous discrepancy between where people were born and what they claimed as their ethnic identification. Although 93% of the informants were born in Canada and 43% of those are third generation Canadian at least, a total of only 36% claimed Canadian as their ethnic identification. Although only 4% of the informants were born in Britain, 53% claimed British as their ethnic identification. Part of the problem may lie in people's perception of "ethnic identification," a term generally associated with race or origin rather than citizenship or nationality; hence ethnic identification may be more of an indicator of ancestry than of national loyalty. Clearly, however, nothing in the data can be used as an accurate indication of allegiance or loyalty and the question of whether age alone or age as it reflects association with Britain, Canada or the United States is significant to attitudes toward dialects of English cannot be answered here. Studies such as that done by Warkentyne (1983) in Victoria suggest that loyalty is a factor; hence, further
more precise study is also indicated for Vancouver English.

Whereas people in the middle age group were the least likely to evaluate British English more highly than American, they were the most likely to believe that there is a dialect that could be called Canadian English (1052); 61% of the middle group, 58% of the young and 54% of the old argued for a national dialect (see Figure 8). Again, whether age is the salient factor or it is masking something such as national allegiance or loyalty cannot be clearly determined using this database.

Age is clearly not important to the responses to question 1051, assessing the desirability of adopting American spelling (middle 50%, young and old 53%) or to question 1049, assessing whether or not a Canadian speaking with a British accent is affected (young 35%, middle 36%, old 38%), and the relatively small range of differences in the rates of responses to the other attitude questions, along with the fact that there is no clear pattern to the analysis by age, indicate that the importance of age to the attitudes assessed in section XI of SVEN is questionable.

4.3 Socio-economic status

The analysis by socio-economic status also shows little patterning, as shown in Figure 9. One of the questions (1051--desirability of adopting American spelling) shows stratification by socio-economic status. In answer to this question (1051), 37% of the lowest socio-economic group, 28% of the second, 23% of the third and 17% of the highest group were in favour of adopting American spelling; the lower the socio-economic group the more likely the informant is to agree that Canadians should adopt American spelling.

Figure 9. Attitudes by Socio-Economic Status
The analysis of the responses to the question concerning a variety of English that could be called Canadian (1652) reveals a slight cross-over pattern like the one Labov found in analyzing phonological variants in New York. Although the analysis shows near stratification with the belief that there is a dialect that could be called Canadian English increasing with increased socio-economic status, the second highest class is slightly higher than the top socio-economic group: 45% of the lowest socio-economic group thought there is a Canadian national dialect; 50% of the second group, 60% of the third group and 67% of the highest group agreed. However, the difference of only 1% between the top two groups indicates that there is little if any importance to the cross-over here.

A cross-over pattern is also found in the analysis of people's assessment of their own speech (1047); however, here the cross-over is between the two lower classes, and the figures are higher than those for the question of a national dialect. Of the lowest socio-economic group, 53% claimed to be satisfied with their own speech; 48% of the second group, 65% of the third group and 72% of the highest group made the same claim. The cross-over pattern between the lower two classes reflects what Trudgill (1974) found in his study in Norwich where the cross-over was not between the highest two classes but rather between the lower and working class groups. The implications of such cross-over patterns cannot be considered in detail in this work, but what should be noted here is that, with or without cross-over patterns, the responses to the last three questions considered here all reveal a break or a step between the lower two and the upper two socio-economic groups; the difference in rate of agreement between groups two and three is always greater than the difference between any other two groups.

The other three questions, however, show very different trends. For the question concerning CBC English as standard (1650), the highest and lowest socio-economic groups have rates of positive response that are higher than the others, an erratic pattern that can be seen clearly in Figure 9. In response to question 1060, 53% of the lowest socio-economic group and 44% of the highest group as opposed to 42% of the third group and 30% of the second group agreed that the language of the CBC announcers should be standard for Canadians. Although the highest and lowest groups have the highest two rates of agreement with CBC English as standard, the highest difference in rates is between the middle two groups, a difference of 12% with the second socio-economic group being the lowest.

The break in the rate of positive response to the question assessing whether or not people think that a Canadian speaking with a British accent is affected (1048) is unusual in that it is between the highest socio-economic group and the other three; 40% of the third group agreed that a Canadian with a British accent is affected; 39% of the lowest group and 38% of the second lowest group agreed, but only 27% of the highest socio-economic group shared that thought. Although the range is not broad, there is some influence here and what pattern unfolds is not predictable.
In a different pattern are the responses to the assessment of the pleasantness of a British accent (1043): 62% of the highest three socio-economic groups claimed that a British accent is more pleasant to listen to than an American accent but only 53% of the lowest class agreed. The complexity of the question as outlined above may explain such an unusual socio-economic division in the analysis of the responses; it is possible that the lowest socio-economic group has a different British accent in mind than the higher three groups. It has been suggested that the reaction of those who think of British accents as those of some of the prominent and active union leaders in Canada is bound to be different, more negative, than the reaction of those who think of either a less specific British English or Standard British English. Unfortunately, nothing in the SVEN data allows this possibility to be tested; hence the question must remain unanswered until further surveys can be undertaken.

It seems, then, that though there are several unusual findings in the analysis of attitudes by socio-economic status, there is some influence and some patterning; there is some stratification and often a break between the upper and lower two classes. Certainly socio-economic status is more influential and patterned than either age or gender and is more important to attitudes than to awareness.

5. Conclusions and recommendations

Although the findings, particularly of the analysis by social factors of the attitudes and awareness section of the Survey of Vancouver English, are neither as conclusive nor as regular as one would hope, the survey successfully quantifies awareness of and attitudes toward varieties of English, particularly the national varieties that are generally referred to as "British English," "American English" and "Canadian English." The study shows clearly that more Canadians than is generally thought believe there is a variety that could be called "Canadian English," thus indicating that linguistically, at least, Canadians do have an identity. The study also quantifies a degree of satisfaction with the informants' own speech that further indicates Canadian linguistic identity. Thus, we see that, although Canadians recognize and react to two strong influences, i.e., American and British, and although Canadians think highly of British English, preferring it to American, they are not without their own dialect and identity, which they maintain and defend.6

The study clearly indicates a need for further, more direct assessment of attitudes toward Canadian English; use of a matched guise technique that would produce data less dependent on self-reporting could enhance our understanding of attitudes toward Canadian English, of the reliability of the suggested insecurity of Canadian identity and of the uniqueness of the Canadian sociolinguistic context. However, this study also indicates that attributing attitude differences to gender, age and socio-economic status seems to be an over-simplification and, perhaps, an over-generalization. The SVEN database is congruent with gender masking not only such things as role (as Trudgill 1974 found) but also familiarity with the variety being assessed. Analysis of SVEN
further suggests that the age factor may mask something more salient like national loyalty (as Warkentyne 1983 found in his study at the University of Victoria). Thus, in future studies, care must be taken to ensure that distinctions that are finer than the standard gender, age and socio-economic status can be made. The database also indicates that familiarity with the CBC is not as common as sometimes thought and that exposure to the CBC is affected by all standard social factors (see endnote 5), future research, then, must include assessment of familiarity with the CBC and must not assume general familiarity. Finally, it is clear from SVEN that all future research into language attitudes among Canadian anglophones can and must assume existence of something that could be called "Canadian English" and should directly assess attitudes toward Canadian English along with those toward British and American English.

Notes

1 Ryan, Giles and Sebastian (1982: 7) provide a technical definition of language attitudes: "Any affective, cognitive or behavioural index of evaluative reactions toward different language varieties or their speakers." Their work includes a good bibliography of theoretical discussions and studies of language attitudes. Other good studies and discussions of language attitudes theory include those in Giles and Powesland (1975) and Schenker and Giles (1979); Pringle (1985) discusses attitudes toward Canadian English.

2 Robert McNeil—himself a Canadian—journalist and co-author of The Story of English, said in an October 4, 1986 interview with Peter Gzowski (CBC, Morningside), "and Canadians, God knows, are always looking for ways to give themselves identity," just one example of many similar comments that we hear in the media regularly.

3 Of course, "reasonable" is a more general term than might have been used; I have heard people say that because American spelling is generally shorter than British, it is more economical and therefore more practical. Perhaps "economical" might have been a more specific word than "reasonable" to use in the question. However, the fact remains that the informants' attention was drawn to a practical matter rather than simply to an abstract attitudinal preference.

4 This question is also complex as it does not ask informants to compare a Canadian speaking with a British accent to one speaking Canadian English; rather, it asks them to compare two different adoptions or affectations. We are again reminded of the need for studies that give Canadian English equal status to British and American English.

5 In the personal information section of the questionnaire, the informants were asked how much TV they watch and radio and stations they listen to. Only 17% listen to CBC radio, though 22% to CBC radio news and only 3.3% watch CBC TV, though 33% watch CBC TV news. I have noticed during the past ten years or so that many Canadian researchers and professors seem to have come to believe that many more Canadians listen to the CBC than actually do. While it is true that many, or even most, academics listen to CBC, the same is not true for other communities. The breakdown by social status indicates that 48% of the people who listen to the CBC are in the highest socio-economic group and a further 24% are in the second-highest group. Of those who listen to the CBC radio news, 52% are in the highest socio-economic group and a further 53% are in the second-highest group. Similarly of those who watch the CBC TV news, 37% are in the highest group and 33% are in the second-highest group. Only 16% of the people in the lowest two socio-economic groups listen to the CBC. It is a mistake, therefore, for researchers to assume general familiarity with the CBC.

6 The qualifications were often so specific (for example, "from Winnipeg" or "from Toronto" or "from
several cities") that the cross-tabulation of the qualified responses to the question is rendered meaningless not only by the number of empty cells in the cross-tabulation but also by the exclusion of the general in favour of the specific; hence, the table was collapsed for convenience and meaningfulness.

7 The second socio-economic group has the lowest rate of exposure to the CBC TV News and the CBC radio (CBC TV News—I-17%, II-10%, III-30%, IV-33%; CBC Radio—I-12%, II-7%, III-17%, IV-33%); hence they would understandably be the least likely to agree that the language of the CBC announcers should be the standard for Canadians.

8 As is evident in this volume and in other Canadian studies, Canadian English is also developing. For further consideration based on the SVEN database of the development of standard and prestige within Canadian English, see Richards (1988).
Accent and Prestige in Canadian English: The Pronunciation of Lexical Items

Gaelan Dodds de Wolf

In the study of language variation, the pronunciation of lexical items offers a unique opportunity for the investigation of regional and social varieties; it has been suggested (Abercrombie 1966; Macaulay 1973) that this aspect of Standard English remains the least defined. The notion of prestige in standard language is most often associated with speakers of higher social status or with higher education (Avis 1973; Bloomfield 1927; Bartsch 1985; Kahane 1986). Another way of describing prestige is in contrast to prevalence (see Bähr 1976); a prestige term or pronunciation may differ from the one “preferred” by the majority (Gregg 1973b). Alternatively, a prestige pronunciation may stand in contrast to one that contains a stigmatized feature generally associated with those who are socially or educationally disadvantaged.

1. A diverse pronunciation

Canadian English is an independent offshoot of eighteenth century British and American English, an admixture of the two that is still influenced by close and continuing cultural contacts, particularly with American English. Thus, Canadian English provides a rich source of variation in pronunciation which may be analyzed socially, regionally and culturally (see Scargill and Warkentyne 1972; Warkentyne 1971; Warkentyne and Brett 1981a). This particular study will focus on a linguistic and statistical analysis of data gathered in two surveys regarding specific variable lexical items in Canadian English. The purpose is to determine not only trends in individual words but also in regional varieties.

A diverse pronunciation of lexical items has long been noted in the branches of geographic linguistics and social dialectology. The seminal work of Labov (1966) in New York City, and Trudgill (1974) in Norwich, followed by studies such as those of Macaulay (1977) in Glasgow and Milroy (1980) in Belfast, illustrated the importance of quantification in sociolinguistics with respect to the co-variation of phonological variables with sociological parameters, such as age and sex. In Canada, the use of the statistical methodology available in computer programme packages such as Midas (used by Woods 1979) and SPSS (Norusis 1985) aided in the analysis of the urban speech data of Woods’ (1979) sociolinguistics of Ottawa English and Gregg’s (1984) survey of Greater Vancouver.¹ Each of these works, following an adapted Labovian model, clearly demonstrated for their respective cities the co-variation of linguistic phenomena with selected sociological variables.

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2. The research method

2.1 Quantification of pronunciation variables

By combining the data sets from Woods (Ottawa) and Gregg (Vancouver) and by choosing identical lexical items occurring in the word list style from each of the questionnaires, it is possible to enquire into the social and regional use of variant pronunciation forms in Canadian English and to investigate statistically the importance of selected factors in these widely geographically separated regions.

The 340 informants (Ottawa: 100; Vancouver: 240) were divided into 4 two-level categories based on location, sex, age, (birth year < 1939 = forty and over; birth year > 1939 = under forty) and social status (High and a Low), yielding matrices of from two to sixteen cell groups for analysis (Charts I-IV).

**Informants by Location, Sex, Age and Social Class**

**Chart I: Location**

<table>
<thead>
<tr>
<th></th>
<th>Ottawa</th>
<th>Vancouver</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>100</td>
<td>240</td>
</tr>
</tbody>
</table>

**Chart II: Gender**

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>167</td>
<td>173</td>
</tr>
</tbody>
</table>

**Chart III: Generation**

<table>
<thead>
<tr>
<th></th>
<th>Young</th>
<th>Old</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>155</td>
<td>185</td>
</tr>
</tbody>
</table>

**Chart IV: Socio-Economic Status**

<table>
<thead>
<tr>
<th></th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>180</td>
<td>160</td>
</tr>
</tbody>
</table>
Research questions that deal with the variable pronunciation of lexical items in Canadian English can, now, be raised: Are certain variants associated in a significant way with defined social or regional characteristics? Which pronunciations are related to gender, generation or status? Which forms correspond with educated usage?

Eight variable pronunciation items frequently cited in the literature of Canadian English (e.g., Scargill 1974; Scargill and Warkentyne 1972) were selected for the individual study of co-variation:

- schedule
- theatre
- genuine
- nuclear
- futile
- often
- tomato
- garage

The analysis of schedule focused on the initial /sk-/t, now typical of American English, and the alternate form with the /f/ of current British English. Variant forms of the two, both with and without an intrusive schwa in the final syllable, were also counted. With respect to theatre, one variant pronunciation features intervocalic voicing of [l] and another, considered to be nonstandard, is stressed on the second syllable. The particular aspects of pronunciation analyzed for each lexical item will be discussed below.

2.2 Preference

From Table 1 it can be seen that there is close agreement in the two cities with respect to a majority pronunciation or preferred usage for six of the eight words, i.e., futile, nuclear, tomato, often, schedule, garage, with a crossover effect evident in the choice of variants of genuine and theatre. Given the vast distance and terrain separating the two cities, this congruence, then, in preference for these items seems especially noteworthy for Canadian English (see also Priestley 1951).
Table 1: Mean Per Cent for Pronunciation Variants of Selected Lexical Items in Canadian English
(Ottawa and Vancouver)\(^*\)

<table>
<thead>
<tr>
<th>Word</th>
<th>Variant Forms</th>
<th>Ottawa (160)</th>
<th>Vancouver (240)</th>
</tr>
</thead>
<tbody>
<tr>
<td>schedule</td>
<td>[ˈske.dəl]</td>
<td>58</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>[ˈskə.dəl]</td>
<td>10</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>[ˈskə.dəl]</td>
<td>26</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>[ˈskə.dəl]</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>genuine</td>
<td>[ˈdʒu.nɪn] ~ [ˈdʒu.ni.n].</td>
<td>47</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>[ˈdʒu.ni.n]</td>
<td>52</td>
<td>43</td>
</tr>
<tr>
<td>fullie</td>
<td>[ˈfʌ.li]</td>
<td>82</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>[ˈfʌ.li] ~ [ˈfʌ.li]</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>garage</td>
<td>[ˈɡɑ:ri] (3)</td>
<td>60</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>[ˈɡɑ:ri]</td>
<td>23</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>[ˈɡe:ri]</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>[ˈɡe:ri]</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>tomato</td>
<td>[ˈtə.mə.tə] ~ [ˈtə.mə.tə]</td>
<td>76</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>[ˈtə.mə.tə] ~ [ˈtə.mə.tə]</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>[ˈtə.mə.tə] ~ [ˈtə.mə.tə]</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>nuclear</td>
<td>[ˈnə.nər]</td>
<td>47</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>[ˈnə.nər]</td>
<td>31</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>[ˈnə.nər]</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>[ˈnə.nər] ~ [ˈnə.nər]</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>often</td>
<td>[ˈə芬]. ~ [ˈə芬]</td>
<td>53</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>[ˈə芬] ~ [ˈə芬]</td>
<td>46</td>
<td>42</td>
</tr>
<tr>
<td>theatre</td>
<td>[ˈθi.ə.tə]</td>
<td>36</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>[ˈθi.ə.tə]</td>
<td>50</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>[ˈθi.ə.tə] ~ [ˈθi.ə.tə]</td>
<td>12</td>
<td>15</td>
</tr>
</tbody>
</table>

* Missing data and infrequent variants have been omitted from the total scores. Figures for the preferred variant in each city have been underlined whereas the prestige variant itself is underscored.\(^4\)

For an analysis using a loglinear model, in which, theoretically, each cell group might be expected to have a response equal to any other, the Funcat (now Catmod) procedure from SAS (Helwig 1985) was used in order to discover which factors, if any, might be of statistical significance in the selection of a particular value or variant. The results obtained from these analyses are displayed in Table 2.
Table 2: P-value, Significant Factors in the Choice of Pronunciation Variants

<table>
<thead>
<tr>
<th></th>
<th>Location</th>
<th>Sex</th>
<th>Age</th>
<th>SES</th>
<th>Interaction Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>schedule</strong></td>
<td>.01*</td>
<td>.07+</td>
<td>.005*</td>
<td>.331</td>
<td>loc x age x SES (p&lt;.04)**</td>
</tr>
<tr>
<td>N=336; df=3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>futile</strong></td>
<td>.744</td>
<td>.691</td>
<td></td>
<td>.373</td>
<td></td>
</tr>
<tr>
<td>N=329; df=1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>often</strong></td>
<td>.308</td>
<td>.692</td>
<td>.0001*</td>
<td>.373</td>
<td>sex x SES (p&lt;.156)</td>
</tr>
<tr>
<td>N=338; df=1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>tomato</strong></td>
<td>.389</td>
<td>.542</td>
<td>.002*</td>
<td>.102</td>
<td></td>
</tr>
<tr>
<td>N=333; df=2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>genuine</strong></td>
<td>.186</td>
<td>.826</td>
<td>.0001*</td>
<td>.0006*</td>
<td>loc x sex x SES (p&lt;.03)**</td>
</tr>
<tr>
<td>N=337; df=1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>sex x age x SES (p&lt;.06)**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>sex x SES (p&lt;.06)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(loc x x SES (p&lt;.08))+</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(loc x SES (p&lt;.08))</td>
</tr>
<tr>
<td><strong>garage</strong></td>
<td>.238</td>
<td>.926</td>
<td>.03**</td>
<td>.02**</td>
<td>(loc x SES (p&lt;.08))</td>
</tr>
<tr>
<td>N=312; df=3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>theatre</strong></td>
<td>.06+</td>
<td>.835</td>
<td>.004*</td>
<td>.001*</td>
<td></td>
</tr>
<tr>
<td>N=338; df=2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>nuclear</strong></td>
<td>.558</td>
<td>.155</td>
<td>.343</td>
<td>.0002*</td>
<td></td>
</tr>
<tr>
<td>N=327; df=3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* significant at $\alpha = .01$
** significant at $\alpha = .05$
+ tendency

SES = Socio-economic status

For the eight items listed, it can be seen that age was a significant or highly significant factor in the choice of a pronunciation variant for the first seven, with socio-economic status highly significant in the last four (cf. de Wolf 1988a). Location was important in variant choice in one or perhaps two words, i.e., schedule and theatre, while a tendency to importance for gender was indicated for only one, i.e., schedule. It would, thus, appear that a hypothesis concerning the importance of social factors in the choice of a variant pronunciation is supported for these specific items.
A further method, logistic regression, a stepwise procedure of inferential statistics similar to ANOVA, was adopted for the examination of the influence of the independent variables on a single variant pronunciation for each word. This technique involves the step-by-step elimination of non-significant factors, leaving at the final stage only the explanatory variables important at $\alpha = .1$ or less (see Appendix).

3. Results of the individual analyses: the importance of age and socio-economic status

Tests revealed that different factors or combinations of factors appear to be of significance in the use of a particular variant form (see Appendix, Tables A-H, for the statistical results), thus establishing the pronunciation of an individual word as a simple linguistic variable (see also Woods 1979; Gregg 1984). For example, in the case of theatre, with two different preferred regional pronunciations involving the presence or absence of the intervocalic voicing of $tv$ (Table 1), age ($p<.008$) and socio-economic status ($p<.0008$) were highly important in the use of the $[t]$ variant, and location ($p<.001$), sex ($p<.0006$), age ($p<.0001$) and socio-economic status ($p<.0003$) in the use of the $[d]$ form. The pronunciation with $[t]$, significantly favoured by those of higher status (high 59%; low 31%) and those in the older generation (old 55%; young 36%), indicates, then, both prestige and conservatism, illustrating the linguistic change in progress from $[t]$ to $[d]$, noted earlier by Avis (1958) and Gregg (1975). Yet, the significant interaction of location and class ($p<.03$) showed this pronunciation to be more highly regarded by those of high status in Vancouver (high 67%; low 34%) compared with those of a similar status in Ottawa (high 45%; low 23%).

3.1 Regional differences in t-voicing: theatre

The pronunciation of theatre with $[d]$ was in use somewhat more often by those of lower status (44%) vs. those of high (34%), and the young (53%) vs. the old (at 27%), confirming the shift to $[d]$ (Table 3). The interaction of location, age and social class ($p<.003$) showed again the conflict in regional standards, which is evident from the frequency count of Table 1. A significant difference also existed on the basis of sex ($p<.0006$), with men (41%) more apt to voice the $[t]$ than women (36%). The third and least common variant [-e-] was used more often by those of low status (24%) vs. those of high (6%), by those over the age of forty (17%) vs. the young (11%), and by men (16%) rather than women (13%), indicating in both cities a recessive and stigmatized feature.
Table 3: Significant Factors in Variant Choice—theatre

<table>
<thead>
<tr>
<th></th>
<th>[-d-] %</th>
<th>[-i'eld-] %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low SES</td>
<td>44</td>
<td>24</td>
</tr>
<tr>
<td>High SES</td>
<td>34</td>
<td>6</td>
</tr>
<tr>
<td>Old</td>
<td>27</td>
<td>17</td>
</tr>
<tr>
<td>Young</td>
<td>53</td>
<td>11</td>
</tr>
<tr>
<td>Women</td>
<td>36</td>
<td>13</td>
</tr>
<tr>
<td>Men</td>
<td>41</td>
<td>16</td>
</tr>
</tbody>
</table>

3.2 Mainstreaming of a stigmatized variant: genuine

With the word *genuine*, it would appear that the formerly stigmatized variant with [-aɪn] (see Woods 1979: 241-242), has become common usage in both cities (Table 1), with age (p<.0001) and socio-economic status (p<.0006) significant in choice (Table 2). However, in the analysis of each variant (i.e., [-ɪn] and [-aɪn], respectively), location (p<.0003; p<.0007) and socio-economic status (p<.0001; p<.0002) were important (Appendix, Table E). There was a difference of 21% between those of high (63%) and low (42%) status in the use of ['dʒenju:n], and a 9% difference on the basis of location.

The [-aɪn] version was in use by 58% of those of lower status (Table 4), compared with 36% of those of high status, indicating the existence of a prestige difference between the two variants. However, the interaction of age and social class (p<.0001) showed that the older accepted usage [-ɪn], was being preserved by those over forty of high status (78%) relative to those of low (49%), whereas those under forty of the higher socio-economic status group tended to use [-aɪn] more than half the time (67% for young low; 53% for young high). This indicates a significant shift in prestige value for this former social shibboleth.

Table 4: Significant Factors in Variant Choice—genuine

<table>
<thead>
<tr>
<th></th>
<th>[-ɪn-] %</th>
<th>[-aɪn-] %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low SES</td>
<td>42</td>
<td>58</td>
</tr>
<tr>
<td>High SES</td>
<td>63</td>
<td>36</td>
</tr>
<tr>
<td>Old/Low</td>
<td>49</td>
<td>50</td>
</tr>
<tr>
<td>Old/High</td>
<td>78</td>
<td>21</td>
</tr>
<tr>
<td>Young/Low</td>
<td>33</td>
<td>67</td>
</tr>
<tr>
<td>Young/High</td>
<td>46</td>
<td>53</td>
</tr>
</tbody>
</table>

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3.3 British vs. American models: schedule, futile

The words schedule and futile, of interest, respectively, because of onset and final syllable, have often been cited in the literature to illustrate the competing influence of British vs. American English on Canadian English. Four separate variants of the word schedule (Table 1) were investigated.

3.3.1 Gender based use: schedule

With [ʃɛdʒət], the contemporary British form, three factors, location (p<.0001), sex (p<.0001) and socio-economic status (p<.0001) were highly significant. Also significant were interactions of location with age (p<.002); with class (p<.003); with sex and age together (p<.008); with sex and class together (p<.0001); with age and class together (p<.0006); and an interaction of age and class (p<.001) alone was also significant. There was an 11% difference between Ottawa and Vancouver in usage of the British form, while a difference of 10% existed on the basis of socio-economic status, the higher group at 23%, and the lower group 13%. A similar difference was found with gender, with men (23%) using the form more than women (13%) (Table 5).

With respect to the forms with intrusive schwa in the final syllable, [ʃɛdʒuət] was linked to the factors location (p<.0006), i.e., Vancouver (13%) over Ottawa (5%); age (p<.0009), i.e., old vs. young (13%; 8%); and class (p<.0002), i.e., high over low (15%; 7%); while [skɛdʒuət] was associated more often (a 12% difference) with those of lower status (28%), those under forty (young 32%; old 12%), and women (28%) rather than men (15%). While it is evident from Table 1 that [skɛdʒət], based on majority usage, is the preferred form in the two cities, the significant difference in use on the basis of social status (5% fewer high SES use [sk]), together with results from the three other variant forms indicates that the /ʃ/ value, with and without intrusive schwa, was the prestige term (Table 5a).

In the case of [ʃɛdʒət], Ottawans chose this variant significantly more often (26%; 15% for Vancouverites), again showing a difference in regional standard. A gender difference was also shown with men favouring this form, and with women selecting the American version (i.e., [sk-]), with the intrusive schwa. As for [ʃɛdʒuət], this form with intrusive schwa was used significantly more often in Vancouver than in Ottawa, by those over forty and by those of higher status. It would seem then that pronunciations with /ʃ/ have a prestige value. The variety with no intrusive schwa is a male preference, while the intrusive schwa with /sk-/ indicates a female variant. The significant interaction of sex, age and social class (see Table 5b) shows also that young women of low status (with a response mean of 53%), followed by young women of high status (at 34%), used the [skɛdʒuət] version more often. It would appear, then, that this form is gaining ground among young women, often the innovators, in the two cities.
Table 5a: Per Cent Response for Four Pronunciation Variants—schedule

<table>
<thead>
<tr>
<th></th>
<th>[skʃ]</th>
<th>[ʃ]</th>
<th>[jʊə]</th>
<th>[skjʊə]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low SES</td>
<td>51</td>
<td>13</td>
<td>7</td>
<td>28</td>
</tr>
<tr>
<td>High SES</td>
<td>46</td>
<td>23</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>Old</td>
<td>-</td>
<td>-</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>Young</td>
<td>-</td>
<td>-</td>
<td>8</td>
<td>32</td>
</tr>
<tr>
<td>Women</td>
<td>-</td>
<td>13</td>
<td>-</td>
<td>28</td>
</tr>
<tr>
<td>Men</td>
<td>-</td>
<td>23</td>
<td>-</td>
<td>15</td>
</tr>
</tbody>
</table>

Table 5b: Schedule = [skʃdʒʊə] Sex x Age x SES

<table>
<thead>
<tr>
<th></th>
<th>Total N</th>
<th>Mean % (#)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOI</td>
<td>50</td>
<td>24 (12)</td>
</tr>
<tr>
<td>FOII</td>
<td>51</td>
<td>10 (5)</td>
</tr>
<tr>
<td>FYI</td>
<td>34</td>
<td>53 (18)</td>
</tr>
<tr>
<td>FYII</td>
<td>38</td>
<td>34 (13)</td>
</tr>
<tr>
<td>MOI</td>
<td>38</td>
<td>13 (5)</td>
</tr>
<tr>
<td>MOII</td>
<td>46</td>
<td>2 (1)</td>
</tr>
<tr>
<td>MYI</td>
<td>38</td>
<td>26 (10)</td>
</tr>
<tr>
<td>MYII</td>
<td>45</td>
<td>20 (9)</td>
</tr>
</tbody>
</table>

F=Female  O=Old  L=Low status  Y=Young  H=High status
Total N=informants in cell
# = informants providing given response

Regarding [skʃdʒʊə], the most widely chosen form, socio-economic status (p<.02) was found to be significant, with interactions of location and age (p<.03), location and class (p<.04), age and class (p<.03), and the interaction of all three (p<.04) also being important.
Table 6: Per Cent Response for the Interaction of Location, Age and SES—[sk'zdʒə]

<table>
<thead>
<tr>
<th>Ottawa Old Low</th>
<th>35</th>
<th>Vancouver Old Low</th>
<th>55</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ottawa Old high</td>
<td>63</td>
<td>Vancouver Old high</td>
<td>31</td>
</tr>
<tr>
<td>Ottawa Young low</td>
<td>70</td>
<td>Vancouver Young low</td>
<td>37</td>
</tr>
<tr>
<td>Ottawa Young high</td>
<td>67</td>
<td>Vancouver Young high</td>
<td>47</td>
</tr>
</tbody>
</table>

As shown in Table 6, a crossover pattern exists regionally in prestige usage, with a preference for this variant among educated speakers in Ottawa.

3.3.2 Youth preference: futile

The pronunciation of futile showed both a sex (p<.05) and age (p<.02) bias with those under forty (90%), compared to the old (76%), strongly favouring the stressed second syllable (British usage). A significant difference of 1% also existed on the basis of gender, with women at 83% versus men at 82%. The adoption of the American variant with an unstressed second syllable appeared to be age related as well (Appendix, Table E: p<.0001) with those over forty (20%), compared to the young (7%), inclined to this usage.

3.3.3 The effect of orthography: often

With the word often, interest lay in the effect of the spelling pronunciation. The t-less variant was used 20% more often by those over forty (52%), with a significant difference between those over forty of high status (55%) and those of low (49%). A significant difference was also shown between Ottawans of high status (52%) and Vancouverites (43%). The variant with /l/, the prevalent form in both cities, was in use 19% more often by those under forty (67%) than the old, indicating a trend to this form (Table 7). The significant interaction of age and class for both variants (Table E: - [t], p<.003; + [t], p<.009) indicates that those over forty in general and those over forty of high status in particular, a conservative group, frequently used the variant without [t], while those of low status, and the young, especially, tended to be influenced by the presence of the orthographic form. Table 7 indicates this shifting usage in apparent time.
Table 7: The Influence of Age and SES – often

<table>
<thead>
<tr>
<th></th>
<th>-[t]%</th>
<th>+[t]%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old</td>
<td>52</td>
<td>48</td>
</tr>
<tr>
<td>Young</td>
<td>32</td>
<td>67</td>
</tr>
<tr>
<td>Old Low</td>
<td>49</td>
<td>50</td>
</tr>
<tr>
<td>Old High</td>
<td>55</td>
<td>45</td>
</tr>
<tr>
<td>Young Low</td>
<td>28</td>
<td>72</td>
</tr>
<tr>
<td>Young High</td>
<td>36</td>
<td>63</td>
</tr>
</tbody>
</table>

3.4 Prestige or preference: [ae] vs. [ei] or [o] in tomato

In the case of tomato, the British variant with [o] (or rounded [u]) showed a significant difference in use on the basis of location, with a 9% preference in Ottawa compared to 6% in Vancouver. Age was also a factor, with 12% of those over forty, compared to 1% under forty favouring this form (Table 8). With the [ae] variant, factors such as sex (p<.03), age (p<.0007), socio-economic status (p<.002), and interactions of location and age (p<.03), and sex and socio-economic status (p<.04) were all important (Table F). Persons of high status (18% compared to 6% for those of low), those over the age of forty (17% compared to 6% for the young), and women (16% compared to 9% for men) used this form significantly more often (Table 8). The variant with [ei], however, the generally preferred form in current usage, was pronounced significantly more often by those of low status (35%), a difference of 14% over those of high, the young (92%, a 25% difference compared to those over forty), and men (86%, a difference of 14% over women). It would thus seem that the [ae] form might be regarded as the prestige variant, favoured by women and the old, with the British prestige [o] form decreasing, though somewhat less in Ottawa than in Vancouver.

Table 8: Percent Response Variant Pronunciations – tomato

<table>
<thead>
<tr>
<th></th>
<th>[ae]</th>
<th>[ei]</th>
<th>[o] or [o]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low SES</td>
<td>6</td>
<td>66</td>
<td>-</td>
</tr>
<tr>
<td>High SES</td>
<td>18</td>
<td>72</td>
<td>-</td>
</tr>
<tr>
<td>Old</td>
<td>17</td>
<td>67</td>
<td>12</td>
</tr>
<tr>
<td>Young</td>
<td>6</td>
<td>92</td>
<td>1</td>
</tr>
<tr>
<td>Women</td>
<td>16</td>
<td>72</td>
<td>-</td>
</tr>
<tr>
<td>Men</td>
<td>9</td>
<td>86</td>
<td>-</td>
</tr>
</tbody>
</table>

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3.4.2 Factors affecting [æ] or [ɑ] in garage

With the four variant forms of garage, it was found that those under forty (60% to 38% for the old), and Ottawans (60% compared to 43% for Vancouverites) significantly favoured [gæˈju.ə], while those of high status tended to use [gæˈjædʒ] (27% compared to 14% low). The third variant, [gæˈjædʒ], was selected more often by Vancouverites (16% vs. 3% for Ottawans) and those of lower status. The fourth variant [gæˈjɑ.ə] showed a location, age and sex bias (see Appendix, Table G). Vancouverites (13%; Ottawans 4%), men (12%; women 9%) and those over forty (13%; young 7%) used this pronunciation significantly more often. Thus, while [gæˈjɑ.ə] is the overall preferred form in terms of usage, [gæˈjædʒ] would appear to be the prestige form. However, as Table 9 below indicates, a significant increase in prestige use is occurring among the young with [ɑ] (71%).

Table 9: [ɑسر] in garage – A Prestige Use for the Young

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Old Low</td>
<td>35</td>
</tr>
<tr>
<td>Old High</td>
<td>41</td>
</tr>
<tr>
<td>Young Low</td>
<td>47</td>
</tr>
<tr>
<td>Young High</td>
<td>71</td>
</tr>
</tbody>
</table>

The third and fourth variants with [dʒ], on the other hand, would seem to lack prestige; the fourth is losing ground among the young. Both do demonstrate some regional strength.

3.4.3 The influence of gender: nuclear

The final word in our study, nuclear, also had four variants which were each examined statistically (see Appendix, Table H). The form [njuˈklɪə] displayed both sex (p<.0004) and age (p<.0002) significance and a strong tendency towards regionalism (p<.06), with women (34% vs. 18% for men) and those over forty (30% vs. 22% for the young) defining this as the conservative pronunciation. In the case of [njuˈkliə], a trend indicated the importance of gender (p<.08); the interaction of sex and socio-economic status (p<.002) showed that men of high status (60%) used this pronunciation more than men of low status (39%) and women of any status (with both groups at 48%). The third form [njuˈklɪə] was selected significantly more often by those of low status (9%; high 6%), by the young (9%; old 5%), and by men (10%; women 5%) indicating, with its general lack of currency in the two cities, a genuinely stigmatized term. The fourth variant [njuˈklɪə], showed significant differences on the basis of location (p<.02), sex
(p<.01), age (p<.0003) and socio-economic status (p<.0004). This pronunciation was
favoured to some extent by those of low status (23%; high 6%), the young (19%; old
9%), men (17%; women 10%), and Ottawans (14%; Vancouverites 13%). This would
appear also to be a term of low prestige. However, as the pronunciation is used to a
certain degree by those under forty, it could represent either an innovation or a male
term.

3.5 Summary: conservatism and change

As indicated by the tables in the Appendix, age and socio-economic status were the
most recurrent factors in variant pronunciation followed by location and gender. For
example, both age and SES were the main factors in the use of the three variants of the
variable (theatre), whereas age occurred as the major independent variable in the use
of all variants of the variables (futile), (often), and (tomato), and SES in the variants of
 genueme), (theatre), and (schedule).

In the selection of variant pronunciations, one or more factors were important for each
word, supporting the theoretical notion of individual words as linguistic variable items.
Of the eight lexical items investigated, age was found to be significant in the choice of a
variant in seven, with socio-economic status important in four, and location only in one
(Table 2; cf. deWolf 1988a). In the case of the individual usage of items, however,
separate factors were also at work (see Appendix), which indicated for each form,
according to cell group categories, conservatism, innovation, prestige, stigma or
regionalism.

In a few instances, ([ˈʃuːtəɬ] [ˈʃuːtəɬ] and [ˈnuːkɬiəɾi)], the overall prestige term also
coincided with the majority preference transnationally. Other such convergences could
be noted on the basis of location, e.g., [ˈdʒiːʃuːɹəɬ] and [ˈʃuːɹəɬ] in Vancouver, showing
the importance of regional standards. Thus it would seem from this small word sample
that, while a cross-Canadian congruence is evident, regional and social trends are
strongly in force with respect to accent and prestige. The occurrence of the age factor
highlights the importance of linguistic change for certain variables whereas the
presence of socio-economic status demonstrates the power of this particular
explanatory variable in this approach to accent (cf. deWolf 1990b) and its impact on the
conscious or unconscious choices made individually by the informants.

An earlier version of this paper, "The Pronunciation of Lexical Items in Canadian English," was presented
at the Eighty-Fourth Annual Meeting of the Philological Association of the Pacific Coast, University of
California at Riverside, November 1989.

1 Woods' (1979) research has been published (1999) The Ottawa Survey of Canadian English, Queen's
University, Strathy Language Unit, Kingston, Ontario. Gregg's study (this volume) is believed to be the

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most extensive urban survey of English undertaken to date (Gregg 1981c; de Wolf and Hasebe-Ludt 1988). Both surveys employed sound sampling techniques, utilizing a stratified random sample. (See Woods 1979; Gregg 1984; de Wolf 1988b).

2 The survey data for both Ottawa and Vancouver are available for scholarly research through the Data Library, Computing Centre, University of British Columbia. I am obligated to Dr. A.J. Petkau, Department of Statistics, University of British Columbia, for advice regarding the analysis of the individual pronunciation items, and to Thinh Le, formerly at the Centre for Excellence, St. Paul's Hospital, for his assistance with the data.

3 Two comparable socio-economic indices, that of Woixls (1979) for Ottawa and Murdoch (1979) for Greater Vancouver, were divided at midpoint to provide two broad social classifications, Group II, High Status, and Group I, Low Status. The educational division corresponds to high school vs. further education (i.e., university or other training; see de Wolf 1988b).

4 Data was adjusted to reconstitute into whole words the lexical variables that were previously analyzed as phonological variable components. Mergers were made to reduce the number of phonetic variants under study.
Appendix: Tables A-H

Table A. P-value, Significant Factors in the Use of Pronunciation Variants: theatre

<table>
<thead>
<tr>
<th>Source</th>
<th>Variant 1 /l/ F value</th>
<th>PR&gt;F</th>
<th>Variant 2 /d/ F value</th>
<th>PR&gt;F</th>
<th>Variant 3 /ei/ F value</th>
<th>PR&gt;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td><strong>3</strong></td>
<td>152.95</td>
<td>.001*</td>
<td><strong>3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td><strong>3</strong></td>
<td>246.19</td>
<td>.0006*</td>
<td>9.45</td>
<td>.01*</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>10.65</td>
<td>.008*</td>
<td>684.85</td>
<td>.0001*</td>
<td>23.35</td>
<td>.0009*</td>
</tr>
<tr>
<td>SES</td>
<td>22.89</td>
<td>.0006*</td>
<td>343.16</td>
<td>.0003*</td>
<td>150.94</td>
<td>.0001*</td>
</tr>
<tr>
<td>Loc x Sex</td>
<td><strong>3</strong></td>
<td>106.95</td>
<td>.002*</td>
<td>20.25</td>
<td>.002*</td>
<td></td>
</tr>
<tr>
<td>Loc x Age</td>
<td><strong>3</strong></td>
<td>9.62</td>
<td>.06+</td>
<td><strong>3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loc x SES</td>
<td>6.06</td>
<td>.03**</td>
<td>116.29</td>
<td>.002*</td>
<td><strong>3</strong></td>
<td></td>
</tr>
<tr>
<td>Sex x Age</td>
<td><strong>3</strong></td>
<td>138.65</td>
<td>.001*</td>
<td><strong>3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age x SES</td>
<td><strong>3</strong></td>
<td>39.97</td>
<td>.008*</td>
<td>19.81</td>
<td>.002*</td>
<td></td>
</tr>
<tr>
<td>Loc x Sex x Age</td>
<td><strong>3</strong></td>
<td>34.12</td>
<td>.01*</td>
<td>27.90</td>
<td>.0005*</td>
<td></td>
</tr>
<tr>
<td>Loc x Sex x SES</td>
<td><strong>3</strong></td>
<td>17.73</td>
<td>.02**</td>
<td><strong>3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loc x Age x SES</td>
<td><strong>3</strong></td>
<td>89.95</td>
<td>.003*</td>
<td><strong>3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>9.70</td>
<td>.002*</td>
<td>199.20</td>
<td>.0005*</td>
<td>39.95</td>
<td>.0001*</td>
</tr>
</tbody>
</table>

* significant at α = .01
** significant at α = .05
+ tendency
*** not significant
Table B. P-value, Significant Factors In the Use of Pronunciation Variants: genuine

<table>
<thead>
<tr>
<th>Source</th>
<th>Variant 1/In-gn'</th>
<th>F value</th>
<th>PR&gt;F</th>
<th>Variant 2/-atn/</th>
<th>F value</th>
<th>PR&gt;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
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<td>54.89</td>
<td>.0003*</td>
<td></td>
<td>40.49</td>
<td>.0007*</td>
</tr>
<tr>
<td>SES</td>
<td></td>
<td>85.17</td>
<td>.0001*</td>
<td></td>
<td>61.58</td>
<td>.0002*</td>
</tr>
<tr>
<td>Loc x Sex</td>
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<td>48.53</td>
<td>.0004*</td>
<td></td>
<td>26.59</td>
<td>.002*</td>
</tr>
<tr>
<td>Loc x SES</td>
<td></td>
<td>24.92</td>
<td>.003*</td>
<td></td>
<td>18.40</td>
<td>.005*</td>
</tr>
<tr>
<td>Sex x Age</td>
<td></td>
<td>43.87</td>
<td>.0006*</td>
<td></td>
<td>34.55</td>
<td>.001*</td>
</tr>
<tr>
<td>Sex x SES</td>
<td></td>
<td>17.93</td>
<td>.008*</td>
<td></td>
<td>8.69</td>
<td>.02**</td>
</tr>
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<td>Age x SES</td>
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<td>105.29</td>
<td>.001*</td>
<td></td>
<td>76.87</td>
<td>.0001*</td>
</tr>
<tr>
<td>Loc x Sex x Age</td>
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<td></td>
<td></td>
<td>22.35</td>
<td>.003*</td>
</tr>
<tr>
<td>Loc x Sex x SES</td>
<td></td>
<td>34.47</td>
<td>.001*</td>
<td></td>
<td>***</td>
<td></td>
</tr>
<tr>
<td>Sex x Age x SES</td>
<td></td>
<td>52.25</td>
<td>.0004*</td>
<td></td>
<td>39.01</td>
<td>.0008*</td>
</tr>
<tr>
<td>Overall</td>
<td></td>
<td>32.33</td>
<td>.0002*</td>
<td></td>
<td>25.01</td>
<td>.0004*</td>
</tr>
</tbody>
</table>

* significant at α = .01  
** significant at α = .05  
*** not significant
Table C. P-value, Significant Factors in the Use of Pronunciation Variants: schedule

<table>
<thead>
<tr>
<th>Source</th>
<th>Variant 1</th>
<th>Variant 2</th>
<th>Variant 3</th>
<th>Variant 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>/ʃ/</td>
<td>/ʃ/k/</td>
<td>/ʃ+/i/-u/</td>
<td>/ʃ/k+/i/-u/</td>
</tr>
<tr>
<td>Location</td>
<td>138.18</td>
<td>.0001*</td>
<td>82.82</td>
<td>.0008*</td>
</tr>
<tr>
<td>Sex</td>
<td>131.22</td>
<td>.0001*</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Age</td>
<td>4.18</td>
<td>.096+</td>
<td>3.62</td>
<td>.089</td>
</tr>
<tr>
<td>SES**</td>
<td>136.01</td>
<td>.0001*</td>
<td>7.89</td>
<td>.02**</td>
</tr>
<tr>
<td>Loc x Sex</td>
<td>***</td>
<td>***</td>
<td>29.80</td>
<td>.006*</td>
</tr>
<tr>
<td>Loc x Age</td>
<td>32.26</td>
<td>.002*</td>
<td>6.19</td>
<td>.03**</td>
</tr>
<tr>
<td>Loc x SES</td>
<td>27.99</td>
<td>.003*</td>
<td>5.53</td>
<td>.04**</td>
</tr>
<tr>
<td>Sex x Age</td>
<td>***</td>
<td>***</td>
<td>75.45</td>
<td>.001*</td>
</tr>
<tr>
<td>Sex x SES</td>
<td>***</td>
<td>***</td>
<td>129.23</td>
<td>.0003*</td>
</tr>
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<td>Age x SES</td>
<td>42.04</td>
<td>.001*</td>
<td>6.92</td>
<td>.03**</td>
</tr>
<tr>
<td>Loc x Sex x Age</td>
<td>17.89</td>
<td>.008*</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Loc x Sex x SES</td>
<td>119.43</td>
<td>.0001*</td>
<td>***</td>
<td>35.45</td>
</tr>
<tr>
<td>Loc x Age x SES</td>
<td>58.83</td>
<td>.0006*</td>
<td>5.88</td>
<td>40.43</td>
</tr>
<tr>
<td>Sex x Age x SES</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>11.25</td>
</tr>
<tr>
<td>Overall</td>
<td>46.77</td>
<td>.0003*</td>
<td>2.78</td>
<td>.08+</td>
</tr>
</tbody>
</table>

* significant at α = .01
** significant at α = .05
+ tendency
Table D. P-value, Significant Factors in the Use of Pronunciation Variants: *futile*

<table>
<thead>
<tr>
<th>Source</th>
<th>Variant 1 - all</th>
<th>Variant 2 -</th>
<th>F value</th>
<th>PR&gt;F</th>
<th>F value</th>
<th>PR&gt;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>4.17</td>
<td>.068+</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Sex</td>
<td>5.08</td>
<td>.05**</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>8.45</td>
<td>.015**</td>
<td>54.41</td>
<td>.0001*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loc x Sex</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loc x Age</td>
<td>6.54</td>
<td>.028**</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex x SES</td>
<td>3.47</td>
<td>.09+</td>
<td>4.07</td>
<td>.07+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loc x Sex x Age</td>
<td>***</td>
<td></td>
<td>14.07</td>
<td>.005*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loc x Sex x SES</td>
<td>***</td>
<td></td>
<td>5.78</td>
<td>.04**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex x Age x SES</td>
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<td></td>
<td>8.18</td>
<td>.019**</td>
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<td></td>
</tr>
<tr>
<td>Overall</td>
<td>6.73</td>
<td>.005*</td>
<td>15.66</td>
<td>.0003*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* significant at $\alpha = .01$
** significant at $\alpha = .05$
+ tendency
*** not significant

Table E. P-value, Significant Factors in the Use of Pronunciation Variants: *often*

<table>
<thead>
<tr>
<th>Source</th>
<th>Variant 1 - /u/</th>
<th>Variant 2 + /u/</th>
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<th>PR&gt;F</th>
<th>F value</th>
<th>PR&gt;F</th>
</tr>
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<tbody>
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<td>Age</td>
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<td>.0001*</td>
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<td></td>
</tr>
<tr>
<td>Loc x SES</td>
<td>26.47</td>
<td>.0004*</td>
<td>30.27</td>
<td>.0003*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex x SES</td>
<td>15.53</td>
<td>.003*</td>
<td>15.48</td>
<td>.003*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age x SES</td>
<td>15.68</td>
<td>.003*</td>
<td>21.43</td>
<td>.009*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loc x Age x SES</td>
<td>17.02</td>
<td>.002*</td>
<td>22.34</td>
<td>.0008*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>20.98</td>
<td>.0001*</td>
<td>23.67</td>
<td>.0001*</td>
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<td></td>
</tr>
</tbody>
</table>

* significant at $\alpha = .01$
Table F. P-value, Significant Factors in the Use of Pronunciation Variants: tomato

<table>
<thead>
<tr>
<th>Source</th>
<th>Variant 1 [ɪ]</th>
<th>PR&gt;F</th>
<th>Variant 2 [ɛ]</th>
<th>PR&gt;F</th>
<th>Variant 3 [ei]</th>
<th>PR&gt;F</th>
</tr>
</thead>
<tbody>
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<td>***</td>
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<td>***</td>
<td></td>
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<td>Sex</td>
<td>***</td>
<td></td>
<td>6.87</td>
<td>.03**</td>
<td>25.89</td>
<td>.0009*</td>
</tr>
<tr>
<td>Age</td>
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<td>.0002*</td>
<td>25.40</td>
<td>.0007*</td>
<td>72.35</td>
<td>.0001*</td>
</tr>
<tr>
<td>SES</td>
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<td></td>
<td>17.42</td>
<td>.002*</td>
<td>29.29</td>
<td>.0006*</td>
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<tr>
<td>Loc x Sex</td>
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<td>***</td>
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<td>10.46</td>
<td>.01*</td>
</tr>
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<td>Loc x Age</td>
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<td>7.02</td>
<td>.03**</td>
<td>***</td>
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<td>Loc x Sex x SES</td>
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<td></td>
<td>4.76</td>
<td>.057+</td>
<td>16.82</td>
<td>.003*</td>
</tr>
<tr>
<td>Loc x Age x SES</td>
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<td></td>
<td>***</td>
<td></td>
<td>5.96</td>
<td>.04**</td>
</tr>
<tr>
<td>Sex x Age x SES</td>
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<td></td>
<td>5.61</td>
<td>.04**</td>
<td>17.35</td>
<td>.003*</td>
</tr>
<tr>
<td>Overall</td>
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<td>.0004*</td>
<td>9.57</td>
<td>.002*</td>
<td>18.55</td>
<td>.0002*</td>
</tr>
</tbody>
</table>

* significant at α = .01
** significant at α = .05
+ tendency
Table G. P-value, Significant Factors in the Use of Pronunciation Variants: garage

<table>
<thead>
<tr>
<th>Source</th>
<th>Variant 1 [-α, 3]</th>
<th>Variant 2 [-α, 3]</th>
<th>Variant 3 [-α, d₁]</th>
<th>Variant 4 [-α, d₃]</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>F value</td>
<td>PR&gt;F</td>
<td>F value</td>
<td>PR&gt;F</td>
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<td>43.87</td>
<td>.001*</td>
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<td>Sex</td>
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<td>***</td>
<td>***</td>
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</tr>
<tr>
<td>Age</td>
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<td>.003*</td>
<td>16.44</td>
<td></td>
</tr>
<tr>
<td>SES</td>
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<td>24.47</td>
<td>***</td>
<td>16.44</td>
</tr>
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<td>Loc x Sex</td>
<td>***</td>
<td>24.47</td>
<td>***</td>
<td>16.44</td>
</tr>
<tr>
<td>Loc x Age</td>
<td>***</td>
<td>4.27</td>
<td>***</td>
<td>14.35</td>
</tr>
<tr>
<td>Loc x SES</td>
<td>***</td>
<td>5.65</td>
<td>***</td>
<td>14.35</td>
</tr>
<tr>
<td>Sex x SES</td>
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<td>5.65</td>
<td>***</td>
<td>14.35</td>
</tr>
<tr>
<td>Age x SES</td>
<td>18.29</td>
<td>16.91</td>
<td>16.91</td>
<td>16.91</td>
</tr>
<tr>
<td>Loc x Sex x Age</td>
<td>.014**</td>
<td>.02**</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Loc x SES x Age</td>
<td>.007*</td>
<td>7.47</td>
<td>.02**</td>
<td>***</td>
</tr>
<tr>
<td>Sex x Age x SES</td>
<td>***</td>
<td>4.65</td>
<td>.056+</td>
<td>15.02</td>
</tr>
<tr>
<td>Overall</td>
<td>25.28</td>
<td>.0001*</td>
<td>7.06</td>
<td>22.26</td>
</tr>
</tbody>
</table>

* significant at α = .01
** significant at α = .05
+ tendency
*** not significant
<table>
<thead>
<tr>
<th>Source</th>
<th>Variant 1 /mju/</th>
<th>Variant 2 /nuk/</th>
<th>Variant 3 /mju/1</th>
<th>Variant 4 /mju/2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Location</strong></td>
<td>.056*</td>
<td>.0004*</td>
<td>***</td>
<td>.0003*</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td>.024**</td>
<td>.005**</td>
<td>6.47</td>
<td>7.44</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>.001*</td>
<td>.001**</td>
<td><strong>.02</strong></td>
<td><strong>.03</strong></td>
</tr>
<tr>
<td><strong>SES</strong></td>
<td></td>
<td></td>
<td><strong>.016</strong></td>
<td><strong>.048</strong></td>
</tr>
<tr>
<td><strong>Loc x Age</strong></td>
<td></td>
<td></td>
<td><strong>.019</strong></td>
<td><strong>.044</strong></td>
</tr>
<tr>
<td><strong>Loc x SES</strong></td>
<td></td>
<td></td>
<td><strong>.002</strong></td>
<td><strong>.008</strong></td>
</tr>
<tr>
<td><strong>Sex x Age</strong></td>
<td></td>
<td></td>
<td><strong>.016</strong></td>
<td><strong>.048</strong></td>
</tr>
<tr>
<td><strong>Sex x SES</strong></td>
<td></td>
<td></td>
<td><strong>.016</strong></td>
<td><strong>.048</strong></td>
</tr>
<tr>
<td><strong>Age x SES</strong></td>
<td></td>
<td></td>
<td><strong>.019</strong></td>
<td><strong>.044</strong></td>
</tr>
<tr>
<td><strong>Loc x Sex x Age</strong></td>
<td></td>
<td></td>
<td><strong>.016</strong></td>
<td><strong>.048</strong></td>
</tr>
<tr>
<td><strong>Loc x Sex x SES</strong></td>
<td></td>
<td></td>
<td><strong>.019</strong></td>
<td><strong>.044</strong></td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td><strong>.002</strong></td>
<td><strong>.001</strong></td>
<td><strong>.008</strong></td>
<td><strong>.0004</strong></td>
</tr>
</tbody>
</table>

* significant at α = .01
** significant at α = .05
+ tendency
*** not significant
Are the Traditional Canadian Diphthongs on the Move?

Margaret M. Murdoch

For this investigation of possible movement in the Canadian diphthongs, a method was devised to show whether singly, or in combination, the sociological variables of sex, age, and social class are associated with any shifts in the phonological variables (au) and (oi). According to our initial analysis, none of these independent variables nor a combination of all three, shows co-variation with the diphthongal elements in question; in fact, in most cases movement away from the traditional pattern is minimal.

1. The diphthongs /au/ and /oi/ in Vancouver English

In the Survey of Vancouver English (SVEN), special attention has been focussed on the diphthongs /au/ and /oi/, in an attempt to discover whether, in this part of Canada, any perceptible movement can be discerned in the pronunciation of these sounds away from their traditional "Canadian" values of [ɔi] and [ʌu], respectively, that is, whether there is any change in the centralized onset termed "Canadian raising" that occurs preceding a voiceless consonant (Chambers 1973; cf. Gregg 1973a).

Generally, as mentioned above, this study finds the Canadian diphthongs to be stable. The pronunciation of one word containing the /au/ diphthong, however, does exhibit dramatic movement away from the traditional norm. This appears to support the theory of sound change by lexical diffusion (Wang 1977), according to which sound changes are not realized simultaneously in all words containing the relevant segment but apply first to one or two, then gradually spread.

2. Methodology

A systematic study of the diphthongs /ai/ and /au/ was made by ensuring their representation in the various styles of the questionnaire, both when followed by /t/ plus vowel, and in other environments with a following voiceless consonant. (For example, Variable Group 6 contains night, nice, etc.; Variable Group 7 contains united, writer, etc.; Variable Group 8 contains house, out, etc.; Variable Group 9 contains outer, shouting, etc.)

Groups 7 and 9 (diphthong plus medial [t]) were isolated so that any possible correlation between the voicing of the [t] and lowering of onset of the preceding diphthong could be studied. The speech styles were, in descending order of formality, minimal contrast, word list, visual-aural, and reading passage (see Gregg, this volume).

Statistical analysis was performed by taking the items in a particular group, (e.g., nice,
right), counting the number of times a given value (say the traditional Canadian
centralized onset diphthong) occurred in each set, and then expressing this as a
percentage. The analysis consisted in discovering the average percentage for each
combination of sex, age, and social class, first by taking each of these independent
variables alone, one at a time, then by taking them simultaneously, all three at once.
The results of this analysis indicate that although age and social class make a very
slight difference in some cases, no real change seems to be occurring with respect to
any of the sociological variables.

3. Findings

3.1 Preservation of traditional values

Combined frequency counts for Variable Group 6 (aiC") show a range of 98% to 95%
preservation of the traditional value [oi] in more formal and less formal styles,
respectively (Table 1). For Variable Group 7 (aiV), the range is wider, from 98% to
83% (Table 2). In Variable Group 8 (auC"), the table indicates a range from 96% to
95% for the [au] pronunciation (Table 3), and for Variable Group 9 (auV), from 96% to
92% (Table 4). These percentages also indicate that there is no dramatic movement
away from the traditional values for these diphthongs in Vancouver speech, with the
possible exception of Variable Group 7 (aiV) in the less formal styles (cf. Chambers
and Hardwick 1986).

3.2 Movement from the traditional pattern

A listing of the items in each group ordered from the highest to the lowest percentage of
[oi] or [au] (centralized onset) values in the four styles provides some insight into what
is happening in Variable Group 7 (see Table 2). It is immediately evident on studying
these that the word united exhibits relatively low percentages for the traditional value
[oi], especially in the least formal reading passage style, where its incidence plunges to
a mere 40%. In this style, as well as in visual-aural style, united forms part of the
phrase "the United States," which gives us, at the same time, an important clue as to
the origin and probable reinforcement of this deviation from the Canadian norm.

When the pronunciation of united is further broken down by sex, age, and social class,
as well as style, we find values as low as 15% [oi] for young women of the two lower
socio-economic groups, 17% for young women of the highest socio-economic group,
and 22% for young men of the second lowest socio-economic group, in the least formal
style. The complementary percentages for deviation from the expected value are
illustrated by Table 5, which shows the breakdown according to sex, age, and socio-
economic status for united in reading passage style. Here we see that at least 30% of
all groups chose the [ai] pronunciation (lowered onset), this percentage rising to over
80% for young women, except those belonging to socio-economic class 3.
Table 1: Percentage [əɪ] Pronunciation for Variable Group 6 (aw-aw) Items (Descending Order)

<table>
<thead>
<tr>
<th>%</th>
<th>Minimal Contrast</th>
<th>Word List</th>
<th>Visual/Aural</th>
<th>Reading Passage</th>
</tr>
</thead>
<tbody>
<tr>
<td>98</td>
<td>knife</td>
<td>bright</td>
<td>all right</td>
<td></td>
</tr>
<tr>
<td>98</td>
<td>price</td>
<td>bike</td>
<td>right</td>
<td></td>
</tr>
<tr>
<td>98</td>
<td>bright</td>
<td>rice</td>
<td>nice</td>
<td></td>
</tr>
<tr>
<td>98</td>
<td>riper</td>
<td></td>
<td>sliced</td>
<td></td>
</tr>
<tr>
<td>98</td>
<td></td>
<td>all right</td>
<td>like</td>
<td></td>
</tr>
<tr>
<td>97</td>
<td></td>
<td></td>
<td>might</td>
<td></td>
</tr>
<tr>
<td>97</td>
<td></td>
<td>nice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>96</td>
<td>nighthawk</td>
<td></td>
<td></td>
<td>tonight</td>
</tr>
<tr>
<td>95</td>
<td></td>
<td>lighthouse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>93</td>
<td></td>
<td>typewriter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>93</td>
<td></td>
<td>flight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>92</td>
<td></td>
<td></td>
<td>typewriter</td>
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<td>90</td>
<td></td>
<td>night</td>
<td></td>
<td></td>
</tr>
<tr>
<td>87</td>
<td></td>
<td></td>
<td></td>
<td>(bicycle)</td>
</tr>
</tbody>
</table>
Table 2: Percentage [əɪ] Pronunciation for Variable Group 7 (əɪtV) Items (Descending Order)

<table>
<thead>
<tr>
<th>%</th>
<th>Minimal Contrast</th>
<th>Word List</th>
<th>Visual/Aural</th>
<th>Reading Passage</th>
</tr>
</thead>
<tbody>
<tr>
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<td>writer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>98</td>
<td>typewriter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>97</td>
<td>white</td>
<td>lighter/brighter</td>
<td>invited</td>
<td>writer</td>
</tr>
<tr>
<td>96</td>
<td>whiter</td>
<td>lighter/brighter</td>
<td>writer</td>
<td></td>
</tr>
<tr>
<td>95</td>
<td>flight (attendant)</td>
<td></td>
<td>right (in front of)</td>
<td></td>
</tr>
<tr>
<td>93</td>
<td></td>
<td>typewriter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>92</td>
<td></td>
<td></td>
<td>right (away)</td>
<td></td>
</tr>
<tr>
<td>91</td>
<td>united</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90</td>
<td></td>
<td></td>
<td></td>
<td>right (away)</td>
</tr>
<tr>
<td>84</td>
<td>united</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td></td>
<td>United (States)</td>
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<td>United (States)</td>
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<tr>
<td>%</td>
<td>Minimal Contrast</td>
<td>Word List</td>
<td>Visual/Aural</td>
<td>Reading Passage</td>
</tr>
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<td>-----------</td>
<td>--------------</td>
<td>----------------</td>
</tr>
<tr>
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<td>out 3</td>
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<td>out 1</td>
</tr>
<tr>
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<td>lighthouse</td>
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<td>out 4</td>
</tr>
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<td>south</td>
<td></td>
<td></td>
<td>house</td>
</tr>
<tr>
<td>93</td>
<td>south</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>93</td>
<td>house</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>93</td>
<td>lout</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>92</td>
<td></td>
<td>outside</td>
<td></td>
<td>(went) out</td>
</tr>
<tr>
<td>90</td>
<td>house</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90</td>
<td></td>
<td>Grouse (Mtn.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>88</td>
<td></td>
<td>mouth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>87</td>
<td></td>
<td>south</td>
<td></td>
<td></td>
</tr>
<tr>
<td>85</td>
<td></td>
<td>house</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4: Percentage [ʌ] Pronunciation for Variable Group 9 (AutV) Items (Descending Order)

<table>
<thead>
<tr>
<th>%</th>
<th>Minimal Contrast</th>
<th>Word List</th>
<th>Visual/Aural</th>
<th>Reading Passage</th>
</tr>
</thead>
<tbody>
<tr>
<td>98</td>
<td></td>
<td>about (a mile)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>97</td>
<td>about (a mile)</td>
<td></td>
<td></td>
<td>about (an hour)</td>
</tr>
<tr>
<td>96</td>
<td></td>
<td>without (a doubt)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>95</td>
<td></td>
<td></td>
<td></td>
<td>out (on)</td>
</tr>
<tr>
<td>94</td>
<td></td>
<td></td>
<td></td>
<td>shouted</td>
</tr>
<tr>
<td>93</td>
<td>shouting</td>
<td>without (a book)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>93</td>
<td></td>
<td>shouting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>92</td>
<td>clouted</td>
<td></td>
<td></td>
<td>about (it)</td>
</tr>
<tr>
<td>90</td>
<td>shouted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>89</td>
<td></td>
<td></td>
<td></td>
<td>out (of)</td>
</tr>
<tr>
<td>88</td>
<td>shouted</td>
<td></td>
<td>outer</td>
<td></td>
</tr>
</tbody>
</table>
Table 5: Percentage [ai] Pronunciation for *united* in Reading Passage Style

|    | 5  | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| MY1|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| MY2|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| MY3|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| MY4|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| FY1|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| FY2|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| FY3|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| FY4|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| MB1|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| MB2|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| MB3|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| MB4|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| FM1|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| FM2|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| FM3|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| FM4|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| MD1|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| MD2|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| MD3|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| MD4|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| FO1|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| FO2|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| FO3|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| FO4|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

The percentages on the top of the graph represent the combined responses containing the given value for all items in each variable group, adjusted for missing values. Percentages rounded to nearest 5.

If, in fact, any movement is taking place in Vancouver speech away from the traditional values for the diphthongs /ai/ and /au/, it is not occurring systematically at present. However, our data may be interpreted as evidence of a possible beginning of change in the value for one diphthong, namely /ai/, by a process of lexical diffusion, as shown by
the fact that the "raised" variant occurs considerably less frequently in the word *united*
than it does in other lexical items exemplifying the context (alTV).

An earlier version of this paper was read at a meeting of the Canadian Linguistic Association held at the
University of British Columbia in Vancouver, 1983.

1 The questionnaire was so designed that each of the phonological variables occurred at least three times
in each of four styles and frequently more often.

2 A word of explanation is in order here: M and F refer to the sexes; Y, M, O, to the age-groups (Young,
Middle, Old); and 1-4 to the socio-economic groups (1 being the lowest). Thus, MY1 indicates a young
male of the lowest socio-economic group, and so on.
Evidence for Linguistic Change in Urban Canadian English

Gaelsan Dodds de Wolf

This paper stems from a sociolinguistic comparison of randomly sampled sociodialect data from two similarly designed and concurrent major Canadian English urban surveys (Woods 1979 for Ottawa, and Gregg 1984 for Vancouver) in a Labovian model (Labov 1966, 1972; see also Trudgill 1972, 1974). As such, it will discuss the statistically significant co-variation of certain phonological variables and grammatical items with social and regional parameters. The regions under consideration lie at opposite ends of a widespread Canadian dialect area (see also de Wolf 1988a, 1990b). Age is salient as an explanatory variable in many of the analyses, providing evidence of linguistic shift (see Byynon 1977 on the crucial nature of generation in the general mechanism of linguistic change).

1. Canadian English as a regional variety

The growing field of Canadian English (CE), now codified in dictionaries and various books of usage, has been established through a number of regional linguistic studies, including urban surveys such as those of Léon and Martin (1979), Woods (1979), Gregg (1984) and Clarke (1985), the works of Avis (1953, 1973), McConnell (1979), and Chambers (1973, 1975, 1979), as well as the Scargill and Warlentyne (1972) study. This latter was the first nation-wide postal survey of ten Canadian provinces in which parents of both sexes and their teenage children provided responses which often indicated a generational shift in use. The questionnaire elicited typical variants in pronunciation, spelling, lexical, and grammatical items.

As a regional variety of World English, and one of the nation's two official languages, the English spoken in Canada is described (Avis 1973; cf. Scargill 1977) historically as a hybrid of British and American English, a composite of each with singularly Canadian characteristics. Despite the continuing high immigration from non-English speaking countries and the effect of external cultural influences, CE has managed to retain its unique linguistic identity (see Bailey 1982; cf. Chambers 1991). In the opinion of Avis (1986: 215), the national norm, "General Canadian," with its roots in Southern Ontario, provides the basis for "an imperfectly described but recognized standard across Canada" (also Chambers and Hardwick 1986).

Closely linguistically and culturally related to Northern American (Bloomefield 1948; Woods 1986; cf. Scargill 1957), the national Canadian variety is distinguished from its American neighbour by phonological features, and a lexicon which, from the beginning, has pursued an independent development. The vocabulary is noted not only for the creativity of its coinages, but also for the borrowings from the indigenous and European languages, particularly French. The phonological pattern consists of a characteristic
ten-vowel (i, I, ei, e, æ, D, a, ou, u, u/ plus schwa), three-diphthong /ai, aʊ, əI phonemic pattern, along with the phenomenon theoretically known as "Canadian Raising", that is, the centring and raising of two of the three Standard English vowel diphthongs, i.e., [at] and [æt] to [au] and [æi], respectively, generally before voiceless consonants, though sometimes before [nt]. Avis (1973), Bailey (1982), and Chambers (1986) have remarked on a few of the less usual syntactic constructions in CE although, as in other varieties of World English, the standard grammar remains remarkably conservative (Gregg 1981a; Wells 1982).

In Canada as elsewhere, patterns of settlement offer competing models of usage based on a complex of social and attitudinal factors which affect linguistic conservatism and change. There are also certain differences of opinion as to what might constitute the definition of an urban or regional "standard" in Canadian English (cf. Lougheed 1986). Two competing concepts defining standard usage are majority preference, i.e., the "preferred" viewpoint, and the preference of a smaller group of the socially or educationally advantaged, the "prestige" view (see Bähr 1976). To what extent, then, we ask, does the generational factor influence such usage?

2. Methodology for a comparison of sociodialect survey data

To answer such a question, a combination of approaches to the available data seems necessary. While adhering to the principles of social and regional dialectology, which emphasize geographic area, political boundaries, patterns of settlement and immigration along with the social background of the native speaker (Davis 1983b), each of the studies to be reported on here also applied the sociolinguistic techniques originally developed by Labov (1983, 1986) and enhanced by Trudgill (1974). In these studies, it is hypothesized that quantifiable and variable linguistic data from a representative sample of urban informants socially graded by an objective scale will co-vary measurably with selected sociological parameters (see Gregg, this volume).

While the methodologies of the Woods (1979) and Gregg (1984) surveys have been discussed in this volume and elsewhere, a brief review is in order. Survey informants—100 in Ottawa and 240 (300 with the pilot project) in Vancouver—were obtained by stratified random sampling and grouped into cells according to categories of age, sex and socio-economic status. Informants were interviewed for an hour or more by a fieldworker, who tape-recorded their responses to a questionnaire designed to elicit tokens for a very large number of phonological variables ranging over various styles. Between 40 and 50 grammatical items were also elicited. The two separate computerized databases were then analyzed through a statistical program package (de Wolf 1985).

For the present two-city comparison, simple dichotomies for age (those 40 and over were considered old, those under 40, young), sex, socio-economic status and location were utilized for the analysis in SAS (Helwig 1985) which, on the advice of the
statistician, combined the pertinent data files from each survey. (See Murdoch 1979 for the socio-economic binary division: post-secondary education is an index indicator for those of high status). The breakdown of the informants by cell groups for both cities is shown in Chart 1. In all, 8 salient phonological variables and 30 grammatical items were examined.

Chart 1: Breakdown of 340 Informants by Location and by Age, Sex, and Socio-Economic Status

<table>
<thead>
<tr>
<th></th>
<th>Ottawa N=100</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>D</td>
<td>O</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>M</td>
<td>1</td>
<td>14</td>
<td>12</td>
<td>17</td>
</tr>
<tr>
<td>F</td>
<td>13</td>
<td>18</td>
<td>11</td>
<td>17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Vancouver N=240</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>D</td>
<td>O</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>M</td>
<td>34</td>
<td>32</td>
<td>25</td>
<td>28</td>
</tr>
<tr>
<td>F</td>
<td>37</td>
<td>33</td>
<td>23</td>
<td>27</td>
</tr>
</tbody>
</table>

Legend:

M Male  O Old  I Low Status  II High Status  F Female  Y Young  N Number of informants in total

2.1 Phonological variables

For the phonological investigation, tokens of a variable, defined by Trudgill (1974) as a linguistic item in co-variation with one or more sociological parameters or with another phonological variable, were collected by using identical words in the same styles. While this rigorous restriction to item identity severely limited not only the number of available
variables but also the comparison of styles, eight variables of particular interest in Canadian English were selected.

The four (sometimes fewer), speaking styles investigated in this particular study were reading passage, picture or audio-visual (AV), word list and minimal pair/contrast, with a further category, a weighted average across style, added. (The free speech and spontaneous narrative sections of the questionnaires were not directly comparable and, thus, were not included in these analyses.) The weighted average across style was used, then, for summary purposes.

The phonological variables include the following: two closely related instances of intervocalic voicing (de Wolf and Hasebe-Ludt 1988), in which an underlying [t] becomes voiced between vowels (V,V), or between lh and a vowel (nV), in words such as beautiful or plenty, respectively (Avis 1973; Woods 1979; Gregg 1984); the Canadian Raising of two of the vowel diphthongs before voiceless consonants (Chambers 1973), as in house (au) and write (ei); (ing), the alternation of -ing, in a final morpheme or as a suffix, as in something or meeting, a variable, according to Wells (1982), in alternation in most varieties of World English; [ju], the allophonic variation of [ju] with [u], as in Duke (Woods 1979; de Wolf 1983), and (hw), the allophonic variation of [w] with [w], as in what, where (Woods 1979; de Wolf 1983); and the phonetic realization of the low back vowel in cot/caught, i.e., [o] vs. [a], the variable (O) (Scott 1939; Gregg 1975; Woods 1979; cf. Avis 1972).

With the exception of the variables (ing) and (nV), which each had three main variants, that is, [i] ~ in ~ in for (ing), and lh, d, th for (nV), each variable was dichotomized into two main values; [t] ~ [d] for (V,V); [au] ~ [ao], [ai] ~ [ai] for the Canadian diphthongs (au) and (ei) (cf. Warden 1975; Chambers and Hardwick 1966); [ju] ~ [u] for (ju); [w] ~ [w] for (hw), and the low back slightly rounded [i], or unrounded vowel [o], the latter common in varieties of American English, for the variable (O).

One variant from each variable, designated as the traditional "standard" for purposes of the analysis, was then selected for the measurement of proportional data, using ANOVA for a single style, and MANOVA for the contrast between styles (de Wolf 1989b). When feasible, variables were also examined by a breakdown into morphological or syntactic categories. In the case of the Canadian diphthongs, variables were examined in an environment which coincided with that of intervocalic voicing. In the variable (V,V), for example (Table 1), single words are represented by beautiful, Saturday, monomorphemes by tomato, water, and formative boundary items by meeting, shouled. Phonetic environments for the variables (au) and (ei), are illustrated by house (auC), shouled (auV), and right (eiC), unified (eiV).
Table 1. Regional Differences between Ottawa and Vancouver for the Weighted Average Across Style for Certain Phonological Variables in Canadian English

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standard Value</th>
<th>Ottawa Mean %</th>
<th>Vancouver Mean %</th>
<th>Difference %</th>
</tr>
</thead>
<tbody>
<tr>
<td>(ing) all items</td>
<td>[ɪŋ]</td>
<td>56</td>
<td>82</td>
<td>26</td>
</tr>
<tr>
<td>(ing) verbals</td>
<td>[ɪŋ]</td>
<td>47</td>
<td>84</td>
<td>37</td>
</tr>
<tr>
<td>(əɪ) all items</td>
<td>[əɪ]</td>
<td>66</td>
<td>94</td>
<td>28</td>
</tr>
<tr>
<td>(əɪ) (əɪc)</td>
<td>[əɪ]</td>
<td>71</td>
<td>93</td>
<td>25</td>
</tr>
<tr>
<td>(əɪ) (əɪv)</td>
<td>[əɪ]</td>
<td>60</td>
<td>93</td>
<td>33</td>
</tr>
<tr>
<td>(ʊ)</td>
<td>[ʊ]</td>
<td>81</td>
<td>55</td>
<td>26</td>
</tr>
<tr>
<td>(Au) all items</td>
<td>[Au]</td>
<td>70</td>
<td>93</td>
<td>23</td>
</tr>
<tr>
<td>(Au) (AuC)</td>
<td>[Au]</td>
<td>75</td>
<td>93</td>
<td>18</td>
</tr>
<tr>
<td>(ntV)</td>
<td>[t]</td>
<td>69</td>
<td>78</td>
<td>9</td>
</tr>
<tr>
<td>(ju)</td>
<td>[ju]</td>
<td>49</td>
<td>57</td>
<td>8</td>
</tr>
<tr>
<td>(hw)</td>
<td>[h]</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>(VtV) all items</td>
<td>[t]</td>
<td>41</td>
<td>47</td>
<td>6</td>
</tr>
<tr>
<td>(VtV)单 words</td>
<td>[t]</td>
<td>40</td>
<td>48</td>
<td>8</td>
</tr>
<tr>
<td>(VtV) monomorphemes</td>
<td>[t]</td>
<td>38</td>
<td>47</td>
<td>9</td>
</tr>
<tr>
<td>(VtV) formative boundary</td>
<td>[t]</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Source: de Wolf 1988b, 1990a

2.2 The grammatical variants

The grammatical variants in the two surveys, shown in Table 2, were elicited from similar syntactic frames (see Woods 1979; Gregg this volume). Seven of the thirty-grammatical items of Standard English, including let's not, doesn't, doesn't any, not any, brought, drank and saw, which showed no variation, were not analyzed (de Wolf 1990a, 1990b, 1992). Only the most frequent variants of each grammatical item were tested through logistic regression (Table 4), an analysis for categorical data similar to ANOVA (de Wolf 1989b).

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Table 2. Grammatical Items from the Ottawa and Vancouver Surveys

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Have you (have you got, do you have)</td>
</tr>
<tr>
<td>2.</td>
<td>Drank simple past of drink (drunk)</td>
</tr>
<tr>
<td>3.</td>
<td>Drunk past participle of drink (drank, drunken)</td>
</tr>
<tr>
<td>4.</td>
<td>There are (there is, there's)</td>
</tr>
<tr>
<td>5.</td>
<td>Brought perfect of bring (has brung, brang, broughten)</td>
</tr>
<tr>
<td>6.</td>
<td>Between J. and me (!)</td>
</tr>
<tr>
<td>7.</td>
<td>Between you and me (!)</td>
</tr>
<tr>
<td>8.</td>
<td>Am I not? (aren't I)</td>
</tr>
<tr>
<td>9.</td>
<td>Lay simple past of lie (laid)</td>
</tr>
<tr>
<td>10.</td>
<td>Fewer (less)</td>
</tr>
<tr>
<td>11.</td>
<td>To Tom/Jason and me (!), to whom (who)</td>
</tr>
<tr>
<td>12.</td>
<td>Sneaked simple past of sneak (snuck)</td>
</tr>
<tr>
<td>13.</td>
<td>Doesn't (don't) 2 x</td>
</tr>
<tr>
<td>14.</td>
<td>Really (real)</td>
</tr>
<tr>
<td>15.</td>
<td>Where are (where's)</td>
</tr>
<tr>
<td>16.</td>
<td>Not any (no)</td>
</tr>
<tr>
<td>17.</td>
<td>Dived simple past of dive (dove)</td>
</tr>
<tr>
<td>18.</td>
<td>Had seen, asked pluperfect usage (had of, had've, would've) 2 x</td>
</tr>
<tr>
<td>19.</td>
<td>If it were (was) 2 x</td>
</tr>
<tr>
<td>20.</td>
<td>Let's not (don't let's)</td>
</tr>
<tr>
<td>21.</td>
<td>Anyway (anyways)</td>
</tr>
<tr>
<td>22.</td>
<td>Used not to (didn't use to, never used to)</td>
</tr>
<tr>
<td>23.</td>
<td>Saw simple past of see (seen)</td>
</tr>
<tr>
<td>24.</td>
<td>Proved past participle of prove (proven)</td>
</tr>
<tr>
<td>25.</td>
<td>Lend (loan)</td>
</tr>
<tr>
<td>26.</td>
<td>Has lain perfect of lie (has laid)</td>
</tr>
</tbody>
</table>
2.3 Analysis of the results

As a result of the tests of significance, the null hypothesis (of no significant co-variation between independent and dependent variables) was not confirmed. Co-variation, therefore, can be said to exist between these linguistic variants and the social and regional factors involved. For many of the items, in fact, the p-value was much less than .01, indicating that there was a reasonably slim chance of lack of association with the linguistic value in question (for tests of significance, Fasold 1984; see also Davis and Houck 1992: 118). For the significant factors it is possible, then, to assess the relative frequency of co-occurrence of each explanatory sociological variable with the linguistic variables in order to ascertain the extent of an individual factor's influence.

For the set of phonological variables, the factors significant in the usage of the standard value were ranked in terms of their repeated appearance: in the resulting list, location was first, age next, then gender and socio-economic status. Looking back to Table 1, we see then the importance of location or geographic area to phonological variability (see de Wolf 1990a). In 7 of the 8 variables, (ing), (ai), (au), (o), (ntV), (ju) and (VIV), or almost 90%, region was significant. For the weighted average across style, major area differences of 20% or more were present in half of the 8 variables, i.e., the Canadian diphthongs (au) and (ai), the variable (o), and (ing) which indicates much geographic variation (Wells 1982), and also some grammatical conditioning according to Labov (1989). However, as illustrated in Table 3, six of the 8 phonological variables investigated showed significant influence by age. In particular, there were large generational differences in use of the variables (hw) and (VIV).

With respect to the grammatical items, Table 4 summarizes the strong influence of socio-economic status as an explanatory variable in the analysis of these variants. As a comparison of Tables 3 and 4 will show, for 75% of the phonological variables and 87% of the variable grammatical items, age was a significant factor.
Table 3: Age Differences Weighted Average Across Style for Certain Phonological Variables in Canadian English

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standard Value</th>
<th>Young Mean %</th>
<th>Old Mean %</th>
<th>Difference %</th>
</tr>
</thead>
<tbody>
<tr>
<td>(hw)</td>
<td>[w]</td>
<td>10</td>
<td>37</td>
<td>27</td>
</tr>
<tr>
<td>(VtV) all items</td>
<td>[t]</td>
<td>34</td>
<td>64</td>
<td>20</td>
</tr>
<tr>
<td>(VtV) single words</td>
<td>[t]</td>
<td>34</td>
<td>55</td>
<td>21</td>
</tr>
<tr>
<td>(VtV) monomorphemes</td>
<td>[t]</td>
<td>32</td>
<td>55</td>
<td>23</td>
</tr>
<tr>
<td>(VtV) formative boundary</td>
<td>[t]</td>
<td>41</td>
<td>60</td>
<td>19</td>
</tr>
<tr>
<td>(ing) all items</td>
<td>[ɪŋ]</td>
<td>69</td>
<td>79</td>
<td>10</td>
</tr>
<tr>
<td>(ing) verbals</td>
<td>[ɪŋ]</td>
<td>69</td>
<td>78</td>
<td>10</td>
</tr>
<tr>
<td>(ju)</td>
<td>[ju]</td>
<td>50</td>
<td>60</td>
<td>10</td>
</tr>
<tr>
<td>(oi) all items</td>
<td>[oi]</td>
<td>81</td>
<td>90</td>
<td>9</td>
</tr>
<tr>
<td>(oi) (oiC)</td>
<td>[oi]</td>
<td>64</td>
<td>93</td>
<td>9</td>
</tr>
<tr>
<td>⟨at⟩ (allV)</td>
<td>[at]</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>(AU) all items</td>
<td>[Au]</td>
<td>83</td>
<td>89</td>
<td>6</td>
</tr>
<tr>
<td>(Au) (AuC)</td>
<td>[Au]</td>
<td>84</td>
<td>91</td>
<td>7</td>
</tr>
</tbody>
</table>

Old ≥ 40  
Young < 40  
Source: de Wolf 1988b, 1990a
### Table 4: Grammatical Variation: Significant Factors in Use

<table>
<thead>
<tr>
<th>Grammatical Item</th>
<th>Location</th>
<th>Sex</th>
<th>Age</th>
<th>SES</th>
<th>Interaction Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Proterite</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lay/laid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sneakied/snuck</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dived/dove</td>
<td>xx</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Present Perfect</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>drunk/drank</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>proved/proven</td>
<td>xx</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lain/laid</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pluperfect</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>had/would've, had've</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>had (use)</td>
<td>xx</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subjective</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>if I were/was</td>
<td>xx</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>if it were/was</td>
<td>xx</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Variants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>have you (got/ do you have</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>am I not/ aren't I</td>
<td>xx</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>used not/never used to</td>
<td>xx</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lend/loan (lex.)</td>
<td>xx</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Agreement</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>there are/there's</td>
<td>xx</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>where are/where's</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Modifiers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>fewer/less</td>
<td>xx</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>really/real</td>
<td>xx</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>anyway/ anyways</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Grammatical Item | Location | Sex | Age | SES | Interaction Effects
--- | --- | --- | --- | --- | ---
Preposition + object | | | | | |
between J. and me/I | x | | | | xx
between you and me/I | | xx | | | xx
| | | xx | | xx
| | | | xx | xx

*Significant at $\alpha = .05$

An x indicates the significant occurrence of a factor in the analyses of particular variants in a grammatical item.


3. Generational change in CE

3.1 Variation in the CE accent

The category of age provides the evidence for this discussion of phonological variation. Table 3 reveals that, for three-quarters of the phonological items, generation was significant. Only the variable (ntV) remained generationally stable in each style. A change in apparent time, to a greater or lesser extent, occurred for (VtV), (ing), (Au), (od), (ju) and (hw) (Labov 1963, 1966, 1972; Bailey, Wike, Tillery, and Sand 1991). The (od) variable also displayed some sensitivity to the age variable in two styles: in reading passage through interaction effects, and in the word list, where a 9% generational distinction occurred (with more [d] usage shown in the older group). Particularly wide differences can be seen in values for the variables (VtV) and (hw), which Avis (1956) and Gregg (1957a, 1957b, also 1988) both suggested years ago were in a process of change. With the percentage means for the young at less than 50% for [t] and only 10% for [m], the traditional value in each case is definitely faltering. According to Gregg (1968: 440), for the variable (hw), the merger of the two variants, i.e., [m] and [w] to hw, has now taken place for three-quarters of Canadian English speakers.

For three variables, (VtV), (ju) and (hw), cell-group response behaviour was consistent between cities with respect to stylistic contrast. Only the variable (VtV), in fact, displayed significant response differences between styles. Here, percentages for [t] ranged from a low of 19% in the reading passage, the least formal style, to picture and word list at 29% and 51%, respectively, and on to the most formal minimal contrast at 81%. Both practically and theoretically, this wide style shift then indicates some conscious or subconscious social evaluation of the feature on the part of the informants, an awareness of its changing status in Canadian English (cf. Labov 1966;
Trudgill 1974; de Wolf 1988a).

Although the variables (VTV) and (ju) were individually subject to the separate influence of all four factors, that is, gender, SES, age and region, the overall means for the standard value of (ju) at 55% were somewhat higher than those for (VTV) at 45%. With no significant stylistic contrast shown, the (ju) variable, from the perspective of generation, is seemingly much more stable than (VTV), although it would still appear that [ju] use is declining (cf. Pitts 1986 for the U.S.; cf. also Nylvek 1992 for Saskatchewan).

A summary of the statistically significant influences for a weighted average across style of all eight phonological variables is shown in Table 5.

Table 5: Usage of Phonological Variants by Significant Factor for a Weighted Average Across Style

<table>
<thead>
<tr>
<th>Standard Value</th>
<th>Majority Usage</th>
<th>Less than Half</th>
<th>A Third or Less*</th>
</tr>
</thead>
<tbody>
<tr>
<td>V[t][v]</td>
<td>Female, Old, High*</td>
<td>Male, Low, Vancouver &amp; Ottawa</td>
<td>Young</td>
</tr>
<tr>
<td>n[l][v]</td>
<td>Female &amp; Male High* &amp; Low Vancouver &amp; Ottawa</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>[r[n]]</td>
<td>Female &amp; Male Old &amp; Young Vancouver &amp; Ottawa</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>[au]</td>
<td>Male &amp; Female Old &amp; Young Vancouver &amp; Ottawa</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>[æ]</td>
<td>Old &amp; Young Vancouver &amp; Ottawa</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>[ju]</td>
<td>Female, High* Old &amp; Young Vancouver</td>
<td>Male, Low, Ottawa</td>
<td>--</td>
</tr>
<tr>
<td>[u]</td>
<td>--</td>
<td>Old</td>
<td>High* &amp; Low Young</td>
</tr>
<tr>
<td>[o]</td>
<td>Ottawa &amp; Vancouver</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

* Educated usage
+ Approximate figures only

Source: de Wolf 1988b, 1990a

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Usage according to cell group illustrates the overall variant status in the two cities, confirming, in some measure, Chambers (1986) assertion of a majority accent for CE. For these variables, the standard values for (nltV), (ing), (au), (oi) and (d) were majority preference in both cities. Women, the old and those of high status conspired to maintain the [t] value in (VIV). For the variable (ju) women, both age groups and the educated retained the standard value [j], which contrasted with less than majority use by men, Ottawans and the low status group. It should be noted that, in general, except for the variable (hw), educated usage, defined here by significant use based on socio-economic status, coincides with majority speech. Table 5 also shows the changing status of the variants (ju) regionally and (VIV) and (ju) socially, and the sharp decline, based on change in apparent time, in usage of variation in the variable (hw).

3.2 Grammatical change

For the grammatical items, a few examples will provide valid evidence of linguistic change: the syntactic variable, am I not/aren’t I; the preterites of lie (intransitive) and sneak; the present perfect of drink and the pluperfect of have (de Wolf 1990b); the usage of fewer or less with a count noun; sentence adverbials anyway versus anyways; and prepositional complement use with between and to. For example, in the case of am I not and aren’t I, aren’t I was clearly preferred usage in both Ottawa (69%) and Vancouver (75%). A continuing generational shift to aren’t I is indicated, with the old at 64% use and the young at 87%. Young women (94%) and the young of high status (89%) in general are leading this change.

3.2.1 The preterites of lie and sneak

For the preterite forms of lie, confusion has often been noted between the main variants, lay and laid (Scargill 1974). In both cities, the majority preference, at approximately two-thirds use, was the traditional standard, lay. However, the patterns shown in Table 6, with interactions of location, sex and age, indicate a trend in the young (Ottawa 59%, Vancouver 57%) away from lay. Young Vancouver women (42%) are apparently in the vanguard of this change. Figure 1 graphically illustrates this age-based shift.10
Table 6: Preterite of Lie by Location x Age and Location x Sex x Age

<table>
<thead>
<tr>
<th></th>
<th>#</th>
<th>Lay %</th>
<th>Total N*</th>
<th>#</th>
<th>Laid %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vancouver Old</td>
<td>103</td>
<td>76</td>
<td>136</td>
<td>30</td>
<td>22</td>
</tr>
<tr>
<td>Vancouver Young</td>
<td>59</td>
<td>57</td>
<td>101</td>
<td>35</td>
<td>34</td>
</tr>
<tr>
<td>Ottawa Old</td>
<td>37</td>
<td>79</td>
<td>47</td>
<td>10</td>
<td>21</td>
</tr>
<tr>
<td>Ottawa Young</td>
<td>30</td>
<td>59</td>
<td>81</td>
<td>14</td>
<td>27</td>
</tr>
<tr>
<td>Vancouver Women Old</td>
<td>55</td>
<td>79</td>
<td>70</td>
<td>15</td>
<td>21</td>
</tr>
<tr>
<td>Vancouver Women Young</td>
<td>22</td>
<td>44</td>
<td>50</td>
<td>21</td>
<td>42</td>
</tr>
<tr>
<td>Vancouver Men Old</td>
<td>48</td>
<td>73</td>
<td>66</td>
<td>15</td>
<td>23</td>
</tr>
<tr>
<td>Vancouver Men Young</td>
<td>37</td>
<td>69</td>
<td>54</td>
<td>14</td>
<td>26</td>
</tr>
<tr>
<td>Ottawa Women Old</td>
<td>23</td>
<td>79</td>
<td>26</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>Ottawa Women Young</td>
<td>14</td>
<td>64</td>
<td>22</td>
<td>5</td>
<td>23</td>
</tr>
<tr>
<td>Ottawa Men Old</td>
<td>14</td>
<td>78</td>
<td>18</td>
<td>4</td>
<td>22</td>
</tr>
<tr>
<td>Ottawa Men Young</td>
<td>16</td>
<td>55</td>
<td>29</td>
<td>9</td>
<td>31</td>
</tr>
</tbody>
</table>

*N=number in cell group.
Source: de Wolf 1986b
For the past tense variants of the verb sneak, i.e., sneaked (Ottawa 32%, Vancouver 48%) and stuck (Ottawa 65%, Vancouver 50%), regional usage has apparently shifted as well. Young women (93%, vs. old at 27%; young men, 84%, vs. old, 25%) are again in the forefront of this morphosyntactic shift. The dramatic generational change, based
on apparent time, is shown in Figure 2.

Figure 2. Generational Change: *sneaked* and *snuck*

3.2.2 *The perfect of drink*

With respect to the usage of *has drunk* vs. *has drank*, Scargill (1974) noted an ongoing confusion between the past tense and the past participle (see also Avis 1953). Data from the 1972 Scargill and Warkentyne postal survey of CE by province recorded some generational difference between parents and their high school-aged children nationally, with an overall average response to *has drank* in both B.C. and Ontario of almost 50%. This may be contrasted, then, with the figures (not shown) from the two more recent surveys in which Ottawa informants had a 64% mean for *has drank*, an increase of 15% over the provincial figures, whereas Vancouverites remained at the former average of around 48%. Across location, however, in the two cities the young displayed an equal fondness for both variants at 45%. This generational shift by region in variant usage is illustrated in Figure 3 along with response by socio-economic status.
Statistically speaking, Table 7 demonstrates a regional shift in the use of *has drunk* on the basis of age and socio-economic status, with an age difference of close to 20% in Vancouver. Widespread status-based distinctions are also noteworthy, particularly in Ottawa. However, when compared with their provincial counterparts of a few years before, the means for the young in Vancouver at 38% appear to have remained stable, whereas those of the Vancouver old and both Ottawa groups have increased! As these results cannot be directly compared, it seems safe to infer that some generational change is in progress, especially in Vancouver, where more than 40% of women responded with *has drunk*.
Table 7: Location x Age and Location x SES for Response *has drunk*

<table>
<thead>
<tr>
<th></th>
<th>Vancouver</th>
<th></th>
<th>Ottawa</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>N</td>
<td>#</td>
</tr>
<tr>
<td>Old</td>
<td>77</td>
<td>57</td>
<td>136</td>
<td>33</td>
</tr>
<tr>
<td>Young</td>
<td>39</td>
<td>38</td>
<td>104</td>
<td>31</td>
</tr>
<tr>
<td>Low</td>
<td>39</td>
<td>33</td>
<td>120</td>
<td>17</td>
</tr>
<tr>
<td>High</td>
<td>77</td>
<td>64</td>
<td>120</td>
<td>47</td>
</tr>
</tbody>
</table>

Source: de Wolf 1988b, 1990b

3.2.3 The pluperfect of have

For the pluperfect of *have* (see Gregg, this volume), three major variants were elicited: *had*, *would’ve* and *had’ve* (*hadda*). Table 8 shows some change in usage among the young, although *had* remains the prestige value and majority preference in both Ottawa (72%) and Vancouver (71%). *Would’ve occurred more often in the young (17%) and the young of low status, particularly young women (29%).

3.2.4 Usage of fewer, less and anyway, anyways

The usage of *fewer or less* (plus count noun as, for example, *fewer cars*), and *anyway, anyways* provides another instance of the influence of age on change in CE. Table 9 shows three factors, location, age and socio-economic status, significant in the choice of *fewer or less*, whereas Figure 4 once more illustrates the age shift and the trend to *less*. *Fewer* is more prevalent in Vancouver, among the old and those of high status. In Ottawa, *less* is the majority preference. The young use either variant about equally.
Table 8: Variants of had by Sex and Age and Sex x Age x SES

<table>
<thead>
<tr>
<th></th>
<th>Had</th>
<th>Would've</th>
<th>Had'd've</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Female</td>
<td>196</td>
<td>130</td>
<td>77</td>
</tr>
<tr>
<td>Male</td>
<td>196</td>
<td>113</td>
<td>72</td>
</tr>
<tr>
<td>Old</td>
<td>179</td>
<td>150</td>
<td>84</td>
</tr>
<tr>
<td>Young</td>
<td>146</td>
<td>90</td>
<td>63</td>
</tr>
<tr>
<td>Female Old Low</td>
<td>47</td>
<td>41</td>
<td>87</td>
</tr>
<tr>
<td>Female Old High</td>
<td>56</td>
<td>46</td>
<td>92</td>
</tr>
<tr>
<td>Female Young Low</td>
<td>34</td>
<td>15</td>
<td>47</td>
</tr>
<tr>
<td>Female Young High</td>
<td>37</td>
<td>27</td>
<td>73</td>
</tr>
<tr>
<td>Male Old Low</td>
<td>37</td>
<td>24</td>
<td>65</td>
</tr>
<tr>
<td>Male Old High</td>
<td>41</td>
<td>39</td>
<td>89</td>
</tr>
<tr>
<td>Male Young Low</td>
<td>30</td>
<td>19</td>
<td>53</td>
</tr>
<tr>
<td>Male Young High</td>
<td>41</td>
<td>31</td>
<td>76</td>
</tr>
</tbody>
</table>

Source: de Wolf 1988b

Table 9: Choice of fewer or less by Location and Age and SES

<table>
<thead>
<tr>
<th>Location:</th>
<th>Fewer</th>
<th></th>
<th>Less</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Vancouver</td>
<td>152</td>
<td>64</td>
<td>239</td>
</tr>
<tr>
<td>Ottawa</td>
<td>43</td>
<td>47</td>
<td>91</td>
</tr>
<tr>
<td>Age:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Old</td>
<td>124</td>
<td>69</td>
<td>170</td>
</tr>
<tr>
<td>Young</td>
<td>71</td>
<td>47</td>
<td>151</td>
</tr>
<tr>
<td>SES:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>78</td>
<td>51</td>
<td>154</td>
</tr>
<tr>
<td>High</td>
<td>117</td>
<td>66</td>
<td>176</td>
</tr>
</tbody>
</table>

Source: de Wolf 1988b

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For the variable item *anyway* or *anyways*, the majority preference (Ottawa 78%, Vancouver 71%) and prestige use is *anyway*, as shown in Table 10, where significant differences on the basis of sex, age and socio-economic status are shown. Use of *anyways* appears to be increasing among the young (22%) and certainly *anyway* is decreasing in apparent time. This large age difference is further illustrated in Figure 5.

Table 10: *Anyway* vs. *Anyways* by Sex and Age and SES

<table>
<thead>
<tr>
<th></th>
<th>Anyway</th>
<th></th>
<th>N</th>
<th>Anyways</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td></td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Sex:</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>127</td>
<td>74</td>
<td>171</td>
<td>21</td>
<td>12</td>
</tr>
<tr>
<td>Male</td>
<td>122</td>
<td>75</td>
<td>163</td>
<td>22</td>
<td>13</td>
</tr>
<tr>
<td>Age:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Old</td>
<td>165</td>
<td>91</td>
<td>181</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Young</td>
<td>84</td>
<td>55</td>
<td>163</td>
<td>33</td>
<td>22</td>
</tr>
<tr>
<td>SES:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>110</td>
<td>70</td>
<td>167</td>
<td>27</td>
<td>17</td>
</tr>
<tr>
<td>High</td>
<td>139</td>
<td>79</td>
<td>177</td>
<td>16</td>
<td>9</td>
</tr>
</tbody>
</table>
3.2.5 Between + object pronoun

With respect to the first person object pronoun following between, the national survey of 1972 (Scargill 1974) showed age differences in usage in both provinces. In each case, the parents demonstrated a preference for the I form, and the students (with over 50% use in Ontario, and close to 60% in B.C.) for the standard variant me. However, in both the Vancouver and Ottawa surveys, overall usage was about evenly divided between me and I. The statistical breakdown in Table 11 shows that, despite the wide differences in prestige use, an apparent change to I as prepositional complement has occurred among the young in both Ottawa and Vancouver, with only the young of high status in Ottawa (50% for me vs. 46% for I) holding back. A regional shift in interaction with social factors is, thus, indicated. While the status-based differences are well-preserved in each city, the young of high status in Vancouver are much less conservative of the traditionally standard variant and show a much greater divergence from those over 40 of high status in that city than do their peers in Ottawa.
In Table 12, this regional difference on the basis of age can also be seen following the preposition to. On average, half of the respondents in each city use the pronoun *me*. However, *me* is not majority usage among the young in either city, and in Vancouver, it is common to only one-third of the young. Although wide status-based differences on
basis of gender occurred in both cities, the conservative influence of women of high status does not appear to be retarding this change to /.

Table 12: To ... me vs. To ... I by Location x Age and Location x Sex x SES

<table>
<thead>
<tr>
<th></th>
<th>To ... me</th>
<th></th>
<th>To ... I</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>N</td>
<td>#</td>
</tr>
<tr>
<td>Vancouver Old</td>
<td>88</td>
<td>65</td>
<td>136</td>
<td>47</td>
</tr>
<tr>
<td>Vancouver Young</td>
<td>34</td>
<td>33</td>
<td>103</td>
<td>67</td>
</tr>
<tr>
<td>Ottawa Old</td>
<td>30</td>
<td>67</td>
<td>45</td>
<td>15</td>
</tr>
<tr>
<td>Ottawa Young</td>
<td>21</td>
<td>43</td>
<td>40</td>
<td>28</td>
</tr>
<tr>
<td>Vancouver Women Low</td>
<td>22</td>
<td>37</td>
<td>65</td>
<td>36</td>
</tr>
<tr>
<td>Vancouver Women High</td>
<td>39</td>
<td>65</td>
<td>60</td>
<td>20</td>
</tr>
<tr>
<td>Vancouver Men Low</td>
<td>21</td>
<td>35</td>
<td>60</td>
<td>39</td>
</tr>
<tr>
<td>Vancouver Men High</td>
<td>40</td>
<td>68</td>
<td>59</td>
<td>19</td>
</tr>
<tr>
<td>Ottawa Women Low</td>
<td>10</td>
<td>43</td>
<td>23</td>
<td>13</td>
</tr>
<tr>
<td>Ottawa Women High</td>
<td>21</td>
<td>72</td>
<td>29</td>
<td>8</td>
</tr>
<tr>
<td>Ottawa Men Low</td>
<td>8</td>
<td>57</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>Ottawa Men High</td>
<td>12</td>
<td>43</td>
<td>28</td>
<td>16</td>
</tr>
</tbody>
</table>

Source: de Wolf 1988b

The phonological and grammatical examples discussed above demonstrate the importance of social and regional factors to usage in urban Canadian English. These examples indicate the strong overall influence of age in the linguistic process, counter-balancing the significance of location to regional accent (Abercrombie 1965; Macaulay 1973), and of socio-economic status to grammatical use (McDavid and McDavid 1986).
The analyses of random sampled dialect data from the two surveys also constitute a method for delineating majority preference and educated speech within a variety or in a comparison of sub-regional varieties. The significant co-variation of the selected factors with a number of variable items in a particular branch of World English is evidence of the power of an adapted Labovian model in illuminating areas of innovation and change.

1 This article is a revised and expanded version of a paper first presented at the NWAVE-XVIII/ADS-C Conference held at Duke University, Durham, North Carolina in 1989. I am indebted to R.J. Gregg, Sandra Clarke, and Thinh Le for comments on an earlier draft, and to the Statistical Consulting and Research Laboratory (SCARL), Department of Statistics, UBC, for previous advice on design.

2 See the bibliographies of Avis and Klinoch 1977, Bähr 1977, and Lougheed 1988; as well as dictionaries such as the Gage series; Story, Kinin and Widdowson 1982; and Pratt 1988; also the work of McConnell 1979.

3 Despite certain well-organized areas of variation, such as the Atlantic Provinces, the Ottawa Valley, the Red River Valley, Southern Alberta and Vancouver Island (Avis 1973), and recent trends noted to Americanization (Chambers 1991; Nyvlekk 1992), the homogeneity of Canadian English is noteworthy. It has often been remarked that a uniform dialect covers a wider geographic area than any other English dialect. See, for example, Avis 1973, 1986, Chambers and Hardwick 1986, Gregg 1981a, Priestley 1951, Wells 1962, Woods 1979. Chambers (1986, 1991; cf. Klinok 1983), for example, suggested that a ubiquitous and easily located standard accent is characteristic of Canada's linguistic identity. The standard of the "heartland" variety, increasingly, according to Woods (1979), the majority speech of educated urban Canada, stretches almost 3000 miles from the Ottawa River, on the Ontario-Quebec linguistic-cultural border in the east, to the Pacific Coast on the western edge of the continent, that is, from Vancouver to Ottawa, respectively, Canada's third and fourth largest census metropolitan areas. However, S. Clarke, personal communication, suggests that this dialect 'continuum' also extends through Quebec into the Atlantic provinces: "...it seems to me clear that this variety is also the urban norm in the eastern extremities of the country; the reason why this is not normally stated is that very little work has been done on urban varieties of eastern Canadian English.'


7 Many of the works of the SVEN participant researchers are listed in the Reference list of this volume.

8 Woods (1979) reported on 27 phonological variables in up to 5 styles of increasing formality, namely Free Speech, Picture, Reading Passage, Word List, and Minimal Pair. The same styles were investigated by Gregg (1984), who studied 39 variables, and labeled the styles Spontaneous Narrative (see Hasebe-Ludt, this volume), Audio-Visual, Reading Passage (see Murdoch, Rodman, this volume), Word List and Minimal Contract (most formal). Tokens from the latter four styles from each survey were utilized in this
study.

Concerning specific grammatical items, frequency counts showed wide regional divergence among certain of the verb forms, e.g., the pretenses of sneak and dive, and the past participle of drink. Strong locational differences were also present in the prepositional complement usage of between you and me/it, to whom/who ... to, and in the case of the (roughly grouped) modifiers such as really versus real, anyway/anyways and fatter/fatter with a count noun (de Wolf 1990b).

The suggestion for illustrative figures is owed to J.H. Esling. Mary Santaverino, Department of Computer Science, University of Victoria, kindly provided the diagrams (from de Wolf 1988b). However, in this figure and those following proportional change by level is not implied. Certain computations were made to the Vancouver grammatical data and coded values merged (de Wolf 1988b).
Vowel Systems and Voice Setting in the Survey of Vancouver English

John H. Esling

In an initial acoustic investigation of the Survey of Vancouver English, vowel formant values are calculated and plotted for each of the four socio-economic status groups (SES) and each of the three age categories for both sexes. The vocalic inventories of each of these subgroups are presented here in formant charts for reference purposes. Results of statistical calculations comparing formants across subgroups indicate a number of trends. Long-term average spectral (LTAS) analysis is also introduced here as an acoustic technique for assessing voice quality in continuous speech across the groups of the survey. In results of both vocalic and LTAS comparisons, female groups II and IV, Upper Working Class and Middle Middle Class respectively show most significant differences. SES patterns are also found to differ by age group.

1. Background and project summary

1.1 Scope and objectives

This project deals with the relationship between long-term and short-term components of accent in the socially differentiated varieties of English spoken in Vancouver, British Columbia. The source of data for the project is the Survey of Vancouver English carried out by the dialect research team led by Robert J. Gregg at the University of British Columbia, which was supported by the Social Sciences and Humanities Research Council of Canada (SSHRC). Initial research focuses on the acoustic analysis of the youngest of the three age divisions of the survey, male and female, across the four socio-economic groupings (SES) established in the survey. Subsequent research concentrates on the acoustic analysis of the middle and older age divisions of the survey, also by sex and socio-economic status (SES). Differences in vowel formant patterns and in long-term average spectra (LTAS) across the four social divisions of the survey are established for the younger segment of the survey and are then compared with the social distributions of the middle and older age ranges and evaluated in apparent time to reflect change across three generations. The four socio-economic divisions of the survey, based on a multiple-factor index emphasizing occupation (Blishen 1967; Blishen and McRoberts 1976), are labelled Middle Working Class (MWC/I), Upper Working Class (UWC/II), Lower Middle Class (LMC/III) and Middle Middle Class (MMC/IV).

The objectives are to identify long-term articulatory voice quality settings in Vancouver English, and to determine how these setting features interact with shorter-term, vocalic
elements of the accents of the socially stratified groups of speakers. Traditionally, the emphasis has been placed on differences among specific vocalic or consonantal features of contrasting accents, the aim being to determine direction of language change, but little emphasis has been placed on the more habitual or quasi-permanent setting component of accent described by Honikman (1964), Abercrombie (1967) or Laver (1980).

1.2 Experimental approach

The approach is designed to test the theoretical framework established by Abercrombie (1967) and Laver (1968, 1974, 1975, 1980). Specifically, research investigates whether a majority of acoustic vowel formant values shift with a change in supralaryngeal articulatory setting (Esling and Dickson 1986). This acoustic-phonetic approach consists of acquiring digitized samples of speech from 80% of the subjects in the Vancouver survey; identifying acoustic values for the vowel system of each group of subjects; comparing the vowels of each system as a whole and individually with the vowels of known articulatorily modelled settings to identify directions and degrees of shift; processing long-time acoustic information of comparable context-controlled passages to determine spectral magnitudes of the voiced portions of each subject's speech; comparing these spectral envelopes by survey cell with the acoustic characteristics of the known articulatory settings; and determining the statistical significance of distances between each cell and each model for both vocalic and LTAS data. Preliminary studies carried out with university research funding to develop these algorithms (Esling and Dickson 1985) and applied in the initial year of this project (Esling 1986) indicate that LTAS averages for contrasting language varieties are significantly differentiated from each other and can be associated with specific configurational models. Harmenegies and Landercy (1985, 1989) and Landercy and Harmenegies (1986) provide independent support for the value of LTAS evidence. Their studies of French- and Dutch-speaking Belgian bilinguals indicate that differences in the statistical distribution of phonemes in the two languages result in significant differences between the long-term spectra of the two languages. Thus, for individual speakers of French and Dutch observable modifications in voice setting are introduced with a switch in language. LTAS tendencies in all of these studies reflect the phonological expectations for each of the languages involved.

1.3 Sociolinguistic background

In 1978, Robert J. Gregg at the University of British Columbia began a survey of large proportions designed to record and describe the English spoken in Vancouver. With support from the Social Sciences and Humanities Research Council of Canada, the team from UBC set about to sample the population of Greater Vancouver—the principal metropolitan area of British Columbia and the third largest city in Canada—following a sociolinguistic model to investigate the distribution of such variables as age, sex, and
socio-economic status (SES). This ambitious project paralleled the studies by Labov in New York City (1966), by Shuy, Wolfram and Riley in Detroit (1967, 1968), and by Trudgill in Norwich (1974). During 1979 and 1980, 240 randomly-selected first-
language English speakers who had been born and raised in Vancouver were interviewed in their homes, responding to a lengthy questionnaire covering lexical, syntactic and phonetic items. The interviewer, Margaret Murdoch, was particularly successful in eliciting a style of speech, uniformly comparable across subjects, from a reading passage with local topical content. A major focus of the Vancouver Survey has been on phonetic variation, as evidenced in the reports by de Wolf (1983, 1988a). In 1984, the entire collection of tapes was duplicated and the masters archived at the University of Victoria to allow systematic acoustic analysis of the survey data.

The survey was constructed to include equal numbers of male and female subjects. Then, the sample was subdivided into three age groups and four SES classes. The age groups contained subjects born before 1919; between 1919 and 1945; and between 1946 and 1963. The four SES groupings consider occupation, education, place of residence, housing, and income in a social index. The groups can be termed Middle (I) and Upper Working Class (II), and Lower (III) and Middle Middle Class (IV).

To compare acoustic characteristics, a sample of the vocalic inventory and LTAS has been collected from each cell of the survey. Of the 80 speakers in each age group, 64 (80%) yielded suitable data for acoustic analysis. The results of acoustic analysis are followed by a discussion of the methodological issues involved in using field data in instrumental phonetic analysis, including the recording quality of field data, and its effect on processing systems, and the interaction of voice setting information with vowel location.

2. Younger speakers
2.1 Sampling and speech analysis

To compare vowel clusters across the four SES groups for the 32 female and 32 male natives of Greater Vancouver in the youngest of the three age divisions (16-34) of the survey, vocalic nuclei are computed for two tokens (instances) of each of ten vowel phonemes for each speaker, from identical environments of the same text in reading style. Using Interactive Laboratory System (ILS) speech processing software (Signal Technology 1983) to calculate formant frequencies, speech samples digitized at 10K samples per second are analyzed using 12-pole autoregressive linear predictive coding (Markel and Gray 1976). This analysis produces 12 reflection coefficients per frame (200 points/frame; 50 frames/sec), which are converted to filter coefficients to represent the vocal tract's filtering effects. The filter response of each frame's coefficients is calculated and displayed in a spectral array showing up to five resonant peaks, or formants, in the 0-5000 Hz range. Formant peak centre frequencies are calculated based on a -3 dB shoulder, from which mean first formant (F1) and second formant (F2)
frequencies are calculated for each vowel and filed by group for statistical processing and plotting.

For LTAS analysis, 45 seconds of continuous speech for each speaker, taken from the same text used for the vowel measurements, are digitized using a PDP-11 time-series data-capturing program. One long-term spectrum is computed for each voice, using a mainframe program to accept only voiced portions of the signal while excluding voiceless and low-energy portions. Power spectra of the remaining speech signal are integrated to obtain a final long-term spectrum for each speaker (using non-overlapping 20 msec windows at 50 Hz resolution and a pre-emphasis factor of 1).

2.2 Statistical analysis

Statistics are performed on F1, F2 data for approximately 600 vowels spoken by women and 600 vowels spoken by men, using a log-mean normalization procedure (Hindle 1978). To compute the distance between group vowel clusters, principal component analysis and canonical discriminant analysis are applied to the four female and four male groups. This yields a probability (the Mahalanobis distance) relating collections of vowels to each other, taking first the complete vocalic inventories of each SES group, and then each individual vowel phoneme cluster by group.

A generalized squared distance measure is used to classify F1, F2 coordinates, (test values) into one of the four social groups (known reference cells). Vocalic inventories of the four male groups are also compared with equivalent vowels from texts performed by the author (J. Esling) as models to represent contrasting articulatory settings. In this case, test values are assigned to known reference models to identify the vowels from each group that associate most closely with each model.

For LTAS evaluation, these same procedures are used to relate spectra in the four female and four male groups. LTAS statistics operate on unnormalized data. Male LTAS are compared with LTAS of the articulatory models using generalized squared distance to identify clustering patterns and to relate LTAS shift to vowel formant shift.

2.3 Results of vowel formant analysis

Relationships established for accents of subjects born between 1948 and 1963 (the young group) associate specific supralaryngeal settings with the four socio-economic divisions of the survey. Vowel system orientations of the sets of phonetically performed models match the four SES groups' vocalic inventories. In comparing model settings with survey data, the following articulatory features characterize each SES group: lingual lowering and retraction characterize MWC/I speech; lingual raising and retraction characterize UWC/II speech; lingual fronting characterizes LMC/III speech; and fronting and nasality characterize MMC/IV speech for both female and male
speakers for context-controlled reading passages.

In a velarized setting, for example, formant values decrease as vowels shift high and back (in articulatory terms), corresponding to the general direction of acoustic shift for UWC/II subjects. The relationship between velarization and the young UWC/II group also appears in LTAS comparisons. In direct contrast, it is the vowels of nasal voice that match most closely the vowel inventory and LTAS of young MMC/IV Vancouver speakers.

For female subjects, the combined vocalic inventory of each SES group is significantly differentiated from the other three (p<0.001), and a majority of individually compared vowel phoneme clusters are also separated from SES group to group. The acoustic characteristics of each group’s vowels match the four corners of the two-dimensional vowel space: MWC/I (high F1, low F2); UWC/II (low F1, low F2); LMC/III (low F1, high F2); MMC/IV (high F1, high F2). The most coherent and best differentiated groups are the UWC/II and MMC/IV groups, illustrated in Figure 1, where linguistic contexts of all tokens are identical; speakers vary, by SES group affiliation.

**Figure 1:** Combined Vancouver vowel systems for younger speakers, contrasted by SES group. Vowels for younger UWC (2) and MMC (4) women. Tokens represent identical contexts in reading style. Large dots represent group means.

Male vowel cluster values reflect the pattern for female vowels except that differentiation between the MWC/I and LMC/III groups is marginal for speaker-normalized vowels and not significant using unnormalized data. All other pairings show significant separation (p<0.001). As with female groups, UWC/II males
are furthest separated from other male groups, particularly the MMC/IV group.

In the analysis of individual vowel phoneme clusters by group, 77% of all possible pairings for the 10 vowels are significantly differentiated for female speakers across the four SES groups (p<0.05), and 43% of all pairings remain separated at the p<0.001 level. UWC/II and MMC/IV social groups are successfully differentiated for all ten vowels individually (p<0.01). For MWCA and LMC/III groups, which are most difficult to differentiate, only 4 of the 10 vowels show no separation. This supports the distinctions reported for the complete vowel systems of these groups. The rank order of most significantly separated vowels across groups for male speakers, /o, e, ə, a, i, o, æ, u, ɪ, ɑ/], suggests no obvious principles, except that mid, front to central vowels tend to be better differentiated than peripheral, especially open vowels.

Individual vowels for male speakers demonstrate less separation than female speakers' vowels across the four groups. At the p<0.05 level of significance, 62% of all possible pairings for male vowels are differentiated, but only 27% separate at the more rigorous p<0.001 level. The analysis of individual vowels positively separates male UWC/II and MMC/IV groups, where all vowels differentiate significantly (p<0.001) except /l/, but is not successful in separating the individual vowels of MWCA and LMC/III groups. The rank order of socially descending differentiated vowels for male speakers is: /e, ɪ, ʌ, ə, æ, u, ʊ, o, ɒ, l/. The Spearman rank order correlation coefficient relating male and female rank orders (rho=.24) indicates that the two lists do not correlate, suggesting that those vowels which function as salient social markers for female speakers are not the same vowels that function as principal social markers for male speakers in the same social classes.

One possible interpretation of the male order is that /l/ functions as a pivotal vowel, virtually identical in all groups, and that peripheral tense vowels /e/ and /o/ remain more or less the same across groups, while the majority of shifting occurs on open or mid-open vowels. Greatest differentiation appears in the area of /æ, ə, æ, ɑ/ [where a decrease in F1, F2 signals raising and backing for the UWC/II group, while an increase in F1, F2 signals fronting with nasalization for the MMC/IV group.

2.4 Long-term average spectral analysis

For articulatory identification, LTAS of three 40 sec phonetic texts performed by the author using controlled voice settings described by Laver (1980) and Esling (1978a, 1978b) are analyzed: close rounding (CLR), close jaw (CLJ), dentalization (DEN), retroflexion (RET), palatalization (PAL), uvularization (UVU), velarization (VEL), laryngopharyngalization (LAR), nasalization (NAS), faucal constriction (FAU), raised larynx (RLX) and lowered larynx (LLX). Euclidean distance measures indicate that each text resembles more closely the other two texts with the same voice setting than it does identical texts with different settings. Speaker recognition research corroborates that samples of this length are relatively text-independent (Dickson 1980; Harmegnies

258
1988), and see below (Section 3.1) for more discussion of the effect of the text.

The effect of a superimposed velarized setting on a given text is to lower the first two dominant LTAS peaks (P1, P2), toward the values accompanying an [u]-quality vowel. Superimposing a laryngo-pharyngalized setting on a given text increases P1 and decreases P2, which conforms with acoustic predictions for extreme tongue retraction. A palatalized setting results in a lower P1 and high P2, similar to the values for an [i]-quality vowel; and a nasal setting results in higher-frequency P1, with attenuation in the magnitude of P1 relative to P2.

In the Vancouver survey, with respect to the young age group, males and females considered together, MMC/IV and UWC/II are successfully distinguished using LTAS procedures, while LMC/III and MWC/I groups yield undifferentiated results. For female groups, LTAS data significantly differentiate the MWC/I group from the UWC/II group, and the UWC/II group from the MMC/IV group (p<0.01), while other comparisons show no significant separation. Female LTAS data correspond to SES distributions of vowel formant data to the extent that UWC/II and MMC/IV groups are separated by both measures. Since the LTAS contains all voiced speech, P1, P2 frequencies are predictably lower than for vowel nuclei. LTAS differences appear primarily in P1 and not P2.

<table>
<thead>
<tr>
<th></th>
<th>F1</th>
<th>F2</th>
<th>P1</th>
<th>P2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female MWC I</td>
<td>631</td>
<td>1702</td>
<td>450</td>
<td>1600</td>
</tr>
<tr>
<td>Female UWC II</td>
<td>477</td>
<td>1813</td>
<td>350</td>
<td>1675</td>
</tr>
<tr>
<td>Female LMC III</td>
<td>552</td>
<td>2006</td>
<td>400</td>
<td>1600</td>
</tr>
<tr>
<td>Female MMC IV</td>
<td>683</td>
<td>2039</td>
<td>550</td>
<td>1600</td>
</tr>
</tbody>
</table>

Male LTAS results also significantly differentiate UWC/II from MMC/IV subjects and LMC/III from MMC/IV subjects (p<0.05). Other group pairings again are not significant. The relationship between F1, F2 values and LTAS P1, P2 values is clearer for male groups than for female groups. Both F1, F2 and P1, P2 values for UWC/II males are low, consistent with the predicted pattern of velarization, while F1, F2 and P1, P2 values for MMC/IV males increase, which is consistent with (though not conclusively associated with) the shift predicted for nasalization.

2.5 Interpretation of results

Based on the acoustic distribution of vowel formants across the social range of
Vancouver English, an articulatory interpretation is proposed which associates MWC/I vowels with tongue backing and lowering (laryngo-pharyngalization); UWC/I vowels with tongue backing and raising (velarization); LMC/III vowels with tongue fronting and raising (palatalization); and MMC/IV vowels with tongue fronting and nasality (nasal voice). To quantify these associations, male vowel data are compared with the vowel systems of the articulatorily modelled settings. Using generalized squared distance with normalization, survey data are matched with one of the four reference models proposed above.

Table 2. Distribution of male vowels by SES group across four articulatorily modelled settings (in %, rounded).

<table>
<thead>
<tr>
<th></th>
<th>LAR</th>
<th>VEL</th>
<th>PAL</th>
<th>NAS</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male MWC I</td>
<td>13</td>
<td>68</td>
<td>14</td>
<td>5</td>
<td>139</td>
</tr>
<tr>
<td>Male UWC II</td>
<td>3</td>
<td>97</td>
<td>9</td>
<td>0</td>
<td>145</td>
</tr>
<tr>
<td>Male LMC III</td>
<td>14</td>
<td>67</td>
<td>12</td>
<td>8</td>
<td>153</td>
</tr>
<tr>
<td>Male MMC IV</td>
<td>19</td>
<td>56</td>
<td>10</td>
<td>15</td>
<td>145</td>
</tr>
<tr>
<td>Totals</td>
<td>12</td>
<td>72</td>
<td>9</td>
<td>7</td>
<td>582</td>
</tr>
</tbody>
</table>

Although the majority of survey values cluster with the velarized model, the proportions of assignments reflect the same articulatory pattern as the distribution of female vowels. Individual vowel tokens are assigned primarily to the velarized model from the UWC/II, and to the nasal model from the MMC/IV. Chi-squared tests indicate significant evidence for an association between UWC/II and MMC/IV groups and the four reference models (df=3, p<0.001), and that the two groups are also significantly differentiated on the basis of assignment to the velarized and nasal models (df=1, p<0.001). Broader interpretations of these results are constrained by variables such as the performance conditions of the models and the limitations of using only two formants. Nevertheless, they permit identification of the relative susceptibility of vowels to the shift from an UWC/II to a MMC/IV quality, reflected in an acoustic shift from low to high F1, F2 values.

LTAS data support conclusions reached on vowel formant evidence. Applying Tukey's test for variable effect to the four models to assess the relative influence of each LTAS peak indicates that P1 is a better predictor of velarization or nasality than is P2. P3 is also a successful variable in separating these two settings, and in separating fronting from backing. P4 does not distinguish palatalization from velarization or nasal voice, but does separate it from laryngo-pharyngalization, as does P2. This suggests that P3 adds information to P1, and that P4 adds to P2, when LTAS data are used in addition to F1, F2 to distinguish voices.
Statistical comparison of male LTAS data with the 12 articulatory models indicates that the models as a set are significantly differentiated from the four survey groups (p<0.05). The generalized squared distance function indicates that the survey groups are internally coherent: tongue-retracted, uvularized and velarized settings are associated with MWC/I and UWIC/II groups; nasal and palatalized settings with the MMC/IV group, as shown in Table 3.

Table 3. LTAS data: Association of voice setting models and young male SES groups (in %)

<table>
<thead>
<tr>
<th>Voice Setting</th>
<th>MWC/I</th>
<th>UWIC/II</th>
<th>LMC/III</th>
<th>MMC/IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>UVU</td>
<td>0.50</td>
<td>0.38</td>
<td>0.02</td>
<td>0.09</td>
</tr>
<tr>
<td>VEL</td>
<td>0.51</td>
<td>0.23</td>
<td>0.00</td>
<td>0.25</td>
</tr>
<tr>
<td>LAR</td>
<td>0.05</td>
<td>0.08</td>
<td>0.83</td>
<td>0.07</td>
</tr>
<tr>
<td>LLX</td>
<td>0.09</td>
<td>0.02</td>
<td>0.85</td>
<td>0.05</td>
</tr>
<tr>
<td>FAU</td>
<td>0.03</td>
<td>0.02</td>
<td>0.95</td>
<td>0.00</td>
</tr>
<tr>
<td>DEN</td>
<td>0.22</td>
<td>0.17</td>
<td>0.32</td>
<td>0.29</td>
</tr>
<tr>
<td>CLR</td>
<td>0.31</td>
<td>0.16</td>
<td>0.02</td>
<td>0.51</td>
</tr>
<tr>
<td>CLJ</td>
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</tr>
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<tr>
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</tr>
</tbody>
</table>

These associations suggest a trend, although one qualified at present. Because MWC/I and LMC/III groups are not differentiated except for certain vowels, and because LMC/III LTAS are a more coherent set than MWC/I LTAS, assignments to the LMC/III must be treated circumspectly. On the other hand, bearing in mind the significant separation of UWIC/II and MMC/IV groups on the basis of vowel distribution, the assignment of uvularized and velarized settings to both WC groups is consistent with the vocalic evidence that these groups occupy a different acoustic space from the MMC/IV group. Despite the single-speaker limitations of the performed model approach, the associations suggested here are a positive indication that sociolinguistic survey groups can be analyzed, differentiated and tentatively classified using both vowel formant analysis and LTAS analysis techniques. These results help to isolate those contributions of vocal tract resonance that are of longer-term duration than individual vowels, and also help to identify how contrasting articulatory configurations affect otherwise identical vowels.
3. Middle-aged and older speakers

3.1 Methodology

Procedures tested and applied to the younger Vancouver subjects are refined and applied to the remaining two thirds of the Survey of Vancouver English, concentrating on 160 speakers, male and female, in the middle (between 35 and 59) and older (over 60) age groups. Research continues to focus on how the four socially stratified divisions of each age group vary in articulatory setting, and on how long-term (LTAS) descriptions can be used to characterize the phonological relationship between their accents. In addition, trends over time (apparent as opposed to real) can be postulated. Calculations are based on eight cells (by sex and SES group) of eight speakers each in each of the three age groups. The most practical section of each interview, for acoustic analysis purposes, is the reading passage (based on local, topical lexicon) from which 45-60 seconds of speech are encoded digitally, transferred to the IBM 3090 mainframe, and processed using LTAS techniques described in detail in the final report on the first third of the survey (Eeling 1986). The disadvantage of selecting reading style is that the broad differences between spoken accents are not fully represented due to common features across groups in the acquisition of spoken prose. The advantage of using reading style, on the other hand, is that linguistic context is controlled for all speakers, reducing the possibility of text-dependent variability as a factor. Furthermore, in this particular survey, readings appeared at least as relaxed and natural, if not more so, than much of the elicited speech (see Murdoch, “Reading Passages and Informal Speech,” this volume). Distributions of articulatory setting according to social group for reading style, then, are expected to parallel distributions that would be found for careful speech.

Vowel formant identification for the remaining two age groups of the survey is carried out using an LPC-based (linear predictive coding) algorithm on Micro Speech Lab (MSL) developed in the Centre for Speech Technology Research for the IBM-PC microcomputer. Location of resonant peaks (formants) is based on half-power bandwidths with a maximum frequency band of 500-800 Hz. The IBM-AT with MSL is also used to capture time-series data for LTAS calculations on the mainframe.

Three types of statistical measure are applied. Initially vowel formant data are normalized within speaker groups (within sex) following log-mean normalization proposed by Hindle (1978), and each group’s vowel inventory is calculated and compared for F1, F2 coordinates using principal component and canonical discriminant analysis and a generalized squared distance measure. Comparisons with F1, F2 coordinates of model vowel sets are also evaluated with these measures. LTAS curves are also contrasted across groups and with the set of controlled phonetic models using these statistical measures. A second statistic applied to F1, F2 vowel data consists of calculating means and limits at 5 standard deviations from the mean for each vowel cell. Significance of difference between cells is then established on the basis of disjoint
means lying outside the limits of an adjoining vowel cell. A third statistic, Euclidean distance, is used in addition to the other two in establishing a hierarchical relation between LTAS curves of the SES groups and LTAS of articulatorily modeled speech.

3.2 Report of research findings

3.2.1 Summary

Emerging experimental evidence of voice quality setting differences across the major socio-economic status (SES) divisions of a sample of the English of Vancouver, British Columbia, is reported in this section, corroborating results of the initial acoustic investigation of the youngest of the three age groups. Both vowel quality and long-term quality can be differentiated across the SES classes of the survey. This second part of the sociophonetic research study includes the remaining two age groups of the survey (64 subjects each), thus completing a sample of 192 speakers or 80% of the original 240 Vancouver subjects and extending the acoustic comparison across all three generations of speakers. The age spread among respondents gives an indication of change in articulatory patterns over time.

Formant analysis is performed with an LPC root-solving algorithm that uses Micro Speech Lab data on an IBM microcomputer, replacing ILS on the minicomputer, and increasing significantly the number of vowel tokens sampled. Clusters of ten vowel categories (excluding diphthongs) are calculated using first and second formant peaks for each of the four social divisions of the survey, separating males and females. Each vowel category is compared individually across SES groups and age groups to identify systematic differences. Combined vowels of each group are also compared and tested for significance, and examined to identify direction of shift. Integrated spectral values of the vowel clusters of each group are compared with F1, F2 data to verify the significance of the distribution across the classes that results when spectral information is multiplied over the frequency scale. To investigate the potential for vowel cluster overlap and perceptual ambiguity across groups, individual vowel F1, F2 clusters and integrated vowel spectra are tested for variance to relate the vowel patterns of each class with the corresponding patterns of each other class. LTAS measurements of 45 to 60 seconds of speech are also computed for each subject and compared with F1, F2 and vowel spectrum distributions.

Predictions, based on preliminary findings, are that a vowel shift in the direction of long-term lingual retraction should be expected for working-class speakers (MWC/I and UWC/II), while a generalized vowel shift indicating long-term lingual fronting and nasality is expected to characterize middle-class speakers (LMC/III and MMC/IV). Findings confirm that middle-aged and older MWC/I and UWC/II speakers are significantly differentiated in a majority of vowel categories from MMC/IV speakers; and that MWC/I speakers' vowels are distinct from LMC/III speakers' vowels in several of the comparison groups. Positive results for these groups of speakers across the set of
vowel categories suggest that a relationship can tentatively be identified between the short-term (segmental/voicing) and long-term (voice setting) components of accent for these groups of subjects in the contexts sampled.

Techniques available to corroborate results in follow-up research include matching articulatorily controlled model voice settings with survey data, following and re-assessing Nolan's (1983) framework, as a means of establishing a system for assigning articulatory correlates to acoustic differences in the data, and revised statistical procedures for LTAS computation (Harmagnies and Landercy 1985; Harmagnies 1988; Harmagnies, Eeiling and Delplancq 1989). The most interesting outcome of research to date, however, is the evidence that caution is required in using and interpreting formant extraction procedures in sociophonetic research, especially when applying non-pitch-synchronous Linear Predictive Coding (LPC) analysis to field data. Spurious values for higher-frequency formants may be obtained, and must be verified or reinterpreted using techniques to assess individual power spectra, including long-term average spectral (LTAS) integration of voicing data, in cases where formants appear to be missing as a result of masking by a superimposed vocal tract setting to which the vowel configuration is susceptible.

This research constitutes an analysis of natural speech, in the sense of talk obtained in a relatively informal, non-laboratory interview, and, thus, it is a test of phonetic procedures as applied to field data. The findings provide an example of the valuable insights into phonetic processes that phonetic treatments of sociolinguistic field data can offer, such as the relationship between segmental units and longer-term voice settings.

3.2.2 Research questions and approach

The basic research question for the remaining two age groups of the survey is to determine for different SES groups, keeping age and sex constant, to what extent vowel values, for the whole set, differ from group to group. An assumption is that one or both of the two acoustic parameters, F1 and F2, will discriminate vowel quality across the SES groups of the survey. Another way of putting this assumption is that SES groups are expected to differ significantly in the frequency of F1 or F2 for at least half of the ten vowels that constitute each group. Another assumption is that formant frequency (F1, F2) measurements will correspond to the spectral envelope (long-term response) of the integrated spectrum for the same series of voicing data. A more difficult question to assess is whether the spectral envelope of longer samples of speech that include not only stressed vowels but also neighbouring voiced consonants will also parallel the spectral energy distribution reflected in F1 and F2.

Vowels selected for analysis are from nonnasal, nonlateral environments in the reading passage; five tokens of each vowel from each speaker, or a total of 40 nuclear vowels, are in each comparison cell. A Micro Speech Lab program, MSLSORT, is used to
extract vowel nuclei from the recording using auditory criteria. A Linear Predictive Coding (LPC) analysis-by-synthesis program calculates up to five formants automatically from 10 reflection coefficients. Values of F1 and F2 are then typically identified from the printout and entered into files for statistical processing. This LPC formant-extraction routine was developed as an alternative to formant analysis using ILS. Results of F1, F2 distributions are also plotted on the articulatorily oriented formant chart. Limits are set at five standard deviations from the mean for statistical comparison of trimmed means of adjacent vowel cells. Plots represent 65% confidence ellipses of the sample distributions, which generally overlap at least 40% to 60%. Distributions of the means at 5 SDs, on the other hand, are often disjoint and significant.

3.2.3 Summary of significant relationships

The most salient comparisons within the oldest two age groups occur between female SES groups. Most significant differentiation is found in the middle-aged female group, born between 1919 and 1945. MWC/I and UWC/II groups are significantly differentiated from the MMC/IV, the highest SES group, on the basis of F1. F1 is significantly higher in the top social group in seven out of ten vowels than for the MWC/I women, and also higher in ten out of ten vowels than for the UWC/II women. This relationship parallels the UWC/II-MMC/IV differences for young female speakers for F1 but not for F2. Corresponding auditory qualities are as follows: tongue-retracted in the WC groups with low F1 (e.g., velarized for UWC speakers) and tongue-fronted and slightly nasal in the MC group with higher F1. F1 is also significantly lower for middle-aged UWC/II men than for MMC/IV men, but only for four out of ten vowels (generally open or central vowels; notably /æ, ʌ, α/). For all ten out of ten vowels, however, MWC/I males have an F1 significantly lower than LMC/III males. Corresponding auditory qualities are slight retraction, lowered larynx and openness among MWC/I males (with low F1), and slight nasality and a closer setting among LMC/III males (with higher F1).

MWC/I middle-aged female speakers have significantly more peripheral F2 values than any other group, except MMC/IV. F2 appears higher for front vowels and lower for back vowels in the lowest SES group (MWC/I). The highest SES group (MMC/IV) has more peripheral F1, F2 values for the open vowels /æ/ and /ʌ/. The acoustic region that remains the same ( /i/ and /e/ ) is a very interesting one for perceptual testing as this distinction is often reduced. Although usually reserved for diphthongs, the term "Canadian raising" can also be applied to /e/ raising.

It would appear that the oldest groups of female speakers do not demonstrate the middle-aged pattern. MMC/IV female front vowels are more peripheral in the older (over-60 group) than MWC/I front vowels. But these differences are due largely to the distribution of F2 values, which must therefore be examined in detail to detect possible sources of procedural error.
The most significant pattern for the men over 60 is the similarity of UVC/I and MMC/IV vowels, whereas the differences between these groups are quite marked among men in the 35-60 age range. The three most open vowels, however, are more open and more retracted (in F1 and F2 terms) for the MC than for the WC over-60 group. The single most differentiated vowels for the men over 60 are /i/ and /ai/, at the peripheries of the vowel space. In contrast, /i/ is the only vowel that is not differentiated among younger (under 35) males.

3.2.4 Evaluation and interpretation of findings

Based on the results of F1 distributions, working class (I and II), middle-aged female speakers differ systematically in vowel quality from their middle class (III and IV) counterparts in this sample, for context-controlled items extracted from read speech in field conditions. This systematic pattern of differentiation includes all ten vowels analyzed. The range of F0 is higher in the VC group than in the MC group, although F0 means are not significantly differentiated. F0 is generally not expected to have an effect on F1 or F2, and F0 and F1 do not behave similarly here in any case.

Other groups differ in some vowel values but not others, which suggests that the shift is not a uniform result of pitch differences in the sample but of vocal tract size or shape. The number of speakers in this sample takes much of the variability attributable to vocal tract size differences into account, but it should be noted that the difference between groups such as MVCA and LMCI/III women, for example, is due primarily to F2, indicating that front vowels have a different response from back vowels as reflected here in the measurement of F1, F2. Before attributing differences to vocal tract configuration, then, the procedural details of measurement protocols must be re-examined and evaluated.

Anomalies between results for front and back vowels lead to the possibility that the pattern of rejected, or unusable, formant values in the LPC extraction procedure may be a distinctive characteristic of certain groups’ vowels and settings. The pattern of missing values rejected during the process of assigning a two-coordinate value to each vowel token, and recorded in detail in the course of this research, may therefore be a product of the interaction between long-term vocal tract settings and short-term vowel articulations rather than just an anomaly of the measuring instruments or the so-called unacceptable quality of the voices in a given group.

3.2.5 Qualification of results

The suspicious pattern of F2 for certain groups of speakers appears to be the result of a loss of higher formants in the spectra of certain voices and the unreliability of the formant interpretation process in those cases. Notably, these anomalies occur with settings that are identified as raised and retracted. Some difficulty occurs generally in
sorting out two representative formants for each analysis frame of vowel data throughout the sample, and this may be a result of the absence of pitch-synchronous information in the LPC procedure or of a difficulty that LPC formant extraction has with field data.

Females over 60 are more velarized in the top, MMC/IV, group. Other groups are also identified as retracted, but not velarized (raised). The middle-aged women are more velarized in the UWC group. For middle-aged women MC/III and IV settings are more fronted and nasalized. This should be important evidence of a crossover in voice quality and vowel quality from generation to generation, except for the need to examine F2 values for susceptibility to erroneous measurements.

The top, MMC/IV, over-60 female vowel system is a case in point. F1, F2 values derived from LPC peak extraction appear to be problematical in the neighbourhood of front open and central vowels, specifically in the high readings and wide range of F2. Spectrographic analysis of one vowel, /æ/ (40 tokens from the eight subjects in this cell, separated by silent intervals), confirms a low incidence of higher formant information in the spectrum. F2 values taken from LPC analysis were erroneously identified in the 2000 Hz range, due to fluctuations in bandwidth, whereas spectral representations over time show distinct gaps in higher-level energy, a consistent F1, and intermittent energy in the region of 1600 Hz.

FFT analysis of the same data, of /æ/ for older MMC/IV women contrasted with older MWC/I women, confirms that second-peak values are higher for WC (1800 Hz) than for MC (1600 Hz), and not as high as derived from LPC. For the middle-aged women (born between 1919 and 1945) a long-term integrated spectrum of the set of /æ/ vowel tokens shows no difference in the second peak between UWC/II and MMC/IV women, but confirms the significant difference found using LPC in the value of the first spectral peak, 650 Hz for WC and 800 Hz for MC.

3.2.6 Reassessment of assumptions

These results point to possible problems due either to field characteristics of the data or to a subjective misinterpretation of formant analysis. To address the first possibility, differences can be predicted between field data and laboratory data. In this survey, data are derived from cassette recordings, from acoustically uncontrolled recording conditions but using the same tape-recorder and microphone; upper frequencies can be expected to be attenuated for all speakers. It is, therefore, important to determine how each individual power spectrum was derived. The shape of individual power spectra, from which generalized information such as formant frequencies are extracted, can be verified by referring back to spectrographic measurement using Sonagraph or MSLSPECT techniques. A number of power spectra can be produced which result in envelopes with a similar quality. The example of /æ/ as an individual vowel set (from each group) represents a series of individual power spectra. Techniques used to derive
the spectrum can be shown to reflect a common spectral pattern and demonstrate that the pattern, when averaged, appears in the spectral display of that vowel. Thus, in a single stretch of speech, F2 can be detected intermittently by eye in spectrograms, relative to absence of energy below or above it. In long-term FFTs, where formants are not derived from individual frames but where a complete set of spectral information is integrated as a unit, the effect of F2 is reduced in magnitude through averaging. The second peak derived through spectra can be interpreted to accurately reflect the vocal tract function, if enough data from the same speaker correspond. This implies that it may be more useful to talk about long-term spectral peaks when describing social distributions of phonetic events rather than about the formants of individual segments. For example, in a vowelized setting which broadens bandwidth, a procedure that extracts formant frequencies may fail to capture amplitude and bandwidth phenomena over time. This problem has been pointed out with regard to LPC analysis by Monsen and Engebretson (1983). On the other hand, in a long-term spectral envelope, both frequency peaks and bandwidth can be generalized for events occurring over time.

Spectral envelopes of data can in this way be used to capture generalizations of setting. In an LPC-based formant-extraction process, there has been a lack of clear criteria in going from spectral peaks to interpretation of formants (for sociolinguistic purposes such as two-dimensional articulatory graphing). The reasons for this difficulty have been, firstly, the high background noise that usually accompanies field recordings and, secondly, the absence of pitch-synchronous treatment of field data which would ensure that spectral energy is tied to pitch periods and not affected by averaging over adjacent periods or across zero-amplitude areas. In an LPC treatment, the extracted peaks are only significant in relation to bandwidth; and results may be unreliable in procedures where peak values are taken from LPC output without adequate consideration of bandwidth information. Long-term spectra, on the other hand, retain both pitch and amplitude information over time, which may be used to identify cases of “formant loss” and to relate individual vowel qualities to the potential effects of masking of higher formants by an incompatible vocal tract posture.

3.3 Conclusion

It appears that the vowels in a system can be described as operating as a set, but that integrated long-term spectra may be a more reliable way of characterizing the average behaviour of this set than the parameters F1 and F2. The assumption that a formant frequency will be found at every point along the time domain at which a measurement is taken appears to be false. The intermittent nature of formant frequencies, especially F2, is not captured in the mean (x,y) coordinate distribution of F1, F2, but is reflected in the magnitude of the frequency response and in the bandwidths of the integrated spectral curve averaged over a set of vocalic data. It has to be pointed out that in working with field data it is not enough to simply dismiss a segment or a series of segments from a particular speaker as unreadable because the voice appears to be unsuitable for analysis purposes. There is a very present possibility that higher spectral
peaks are missing or very low in amplitude as a function of the vocal tract response of that voice. Such a generalization can be captured in a long-term average spectral (LTAS) analysis of cells of concatenated data but could be overlooked in a formant-identification approach.

4. Summary of Vancouver data

4.1 F1, F2 distributions

Figures are attached which illustrate graphically the relationship of F1 to F2 across SES groups for the middle and older age divisions of the survey for both sexes. Young speakers' vowels are grouped together in the initial study (combining all 10 vowels within each SES group) to illustrate generalized differences between contextually identical vowel tokens. Figure 1 (see page 257) contrasts all tokens for young UWC/II and MMC/IV women, with 65% confidence ellipses illustrating the mean difference between these groups. For males and females born between 1946-1963, significant differentiation in F1 separates UWC/II (2) and MMC/IV (4) subjects.

Vowel clusters of middle-aged female subjects (born 1919-1945) are summarized across the four SES groups in Figures 2-5, with 65% confidence ellipses to represent the distributions of each of the ten vowel categories. (Figures 2-17, illustrating vowel distributions by survey cell, are collected in the Appendix, pp. 273-88.) Female F1 distributions confirm the pattern for young subjects, with the UWC/II-MMC/IV distinction being the most salient. Middle-aged females demonstrate the same pattern of high F1 values for the MMC/IV as the young group.

The vowel-by-vowel distributions for all middle-aged male subjects are shown in Figures 6-9. WC means are significantly distinct from the LMC/III mean for both F1 and F2 for males, and the UWC/II system is, as with young subjects, lower in F1 than the MMC/IV system. The distribution of acoustic values for MMC/IV vowels for both males and females in the 35-60 age group generally differs from the under-35 age group in that F2 is high for the young speakers but low for the middle-aged speakers.

Females over 60 in the lowest, MVWC/I group (shown in Figure 10) are conspicuously different from other SES groups, although this pattern may need to be reassessed and qualified based on the re-evaluation of the significance of F2 calculations. The other three SES groups of older female subjects are shown in Figures 11-13. The distributions for older male speakers illustrate the virtual absence of systematic differentiation of combined vowels by SES group among older men (born 1898-1918). Older male groups' vowel clusters are summarized in Figures 14-17. The older pattern illustrates a lack of differentiation in the F1 parameter, except in the case of UWC/II and MMC/IV groups and then only for three (open) vowels.

As in the case of middle-aged female subjects, older female speakers show a
considerable range of values for combined vowels in all SES groups, some of which have been questioned. Range of F2 becomes particularly noticeable in the SES-group sequence for older women in Figures 10-13. The separation of front and back vowels in the last, MMC/IV case has led to a reassessment of conclusions based on F2, and to a more general set of recommendations for acoustic quantification of sociolinguistic data. The distinction in F2 between the MWC/I group and MMC/IV group has been shown through spectrographic verification techniques to be discrepant. Although corrected values still significantly differentiate these two groups, caution must be exercised in the interpretation of LPC-derived formant values, which can be checked using long-term spectral averaging techniques.

4.2 LTAS distributions

Long-term average spectral analysis of 60-second samples of subjects' speech follows, to a limited extent, the patterns identified in the distributions of vowel formant frequency data. Among male subjects born between 1919 and 1945, for example, only two cells—the LMC/III and MMC/IV groups—are significantly differentiated for the LTAS measure applied in the procedure used here. This confirms the significant separation of LMC/I and MMC/IV vowel formant data, but does not provide distinctions between the WC and MC groups that were found for the vocalic data using both F1, F2 and vowel-series spectral information.

Women's voices, in the middle-aged group, are distinguished by LTAS across only two cells. Both groups of WC/I and II voice samples are significantly differentiated from the MMC samples. These results also confirm findings based on vocalic data using both F1, F2 and vowel-series spectral information, but do not provide definition of the more subtle differences located using vowel-series techniques. The generalized squared distance measure of intracell variability in the LTAS samples finds that for the eight subjects in each cell, more subjects fall within their expected classes for female than for male voices.

Male (1919-1945):  MWC/I (4, 50%)  Female (1919-1945):  MWC/I (7, 87.5%)
                     UWC/II (3, 37.5%)               UWC/II (5, 62.5%) 
                     LMC/III (4, 50%)               LMC/III (6, 75%)
                     MMC/IV (7, 87.5%)             MMC/IV (8, 100%)

Examples of smoothed LTAS curves for the significant relationships identified among middle-aged speakers using this technique are shown in Figure 18 (below). Both vocalic analyses of short-term features, performed by formant extraction as well as through spectral averaging, and LTAS analyses of longer-term settings, identify the spectral similarities between the lowest SES (WC/I) older women and the highest (MC/IV) middle-aged women. In fact, the difference in LTAS between the bottom and the top of the SES scale among older women is negligible; and their pattern parallels the middle-aged MMC/IV group. A distinction appears, however, among middle-aged
Magnitude (Arbitrary Scale)

Figure 18. Long-term Average Spectra: Middle-aged Vancouver Women.
WC/I and II women, at the other end of the SES scale, whose spectrum departs from both the contemporary MC pattern and the older pattern.

The most significant differences found using vocalic (F1, F2) techniques are therefore confirmed by LTAS measurements. However, the more subtle differences identified from vowel-series data for individual SES cells are not differentiated when long samples of voiced speech are analyzed using the approach followed here. Spectral analysis has been shown in this study to be extremely useful, particularly at the level of integrating spectral values for vowel-series data over combined lengths of approximately five seconds of data as a means of verifying F1, F2 extraction over very brief, 20-msec frames. To adapt LTAS techniques to the types of findings, and cautions, expressed in this report regarding the handling of short-term and long-term time-series data, further research has been undertaken in collaboration with the Acoustic Phonetics Laboratory of the Département de Phonétique et Psycho-acoustique de l'Université de Mons, Belgium, under a research exchange agreement between the University of Mons and the University of Victoria.

This paper is a slightly adapted and combined version of the following two research reports: "Vowel Shift and Long-term Average Spectra in the Survey of Vancouver English" (Proceedings of the XIth International Congress of Phonetic Sciences, Tallinn: Academy of Sciences of the Estonian SSR 1987) vol. 4: 243-46. Analysis of Vowel Systems and Voice Setting in the Survey of Vancouver English, a final report to SSHRCC, 1989. The first of these reports summarizes research findings for the younger subjects in the survey, and the second summarizes research results for the middle-aged and older subjects in the survey.

1 Thanks are due to Robert Gregg and Gaelan Dodds de Wolf for their assistance with the survey material, and to Sam Wang, Jocelyn Clayards, and Pam Olteck for their help in processing speech data. The cooperation of Craig Dickson, Roy Snell, Allan Wyndham and Jim Woolsey of Speech Technology Research, Ltd., in developing and refining processing algorithms, and the support of the President's Committee on Research, University of Victoria, are gratefully acknowledged. The investigations reported here were supported by grants #410-85-0481 and #410-87-0334 from the Social Sciences and Humanities Research Council of Canada.

2 A complete archive of original data from the Survey of Vancouver English has been established in the Department of Linguistics of the University of Victoria through the assistance of institutionally administered federal funding. It is a premise of this research paper that digital acoustic analysis procedures at the University of Victoria, made available through collaboration with Speech Technology Research, Ltd., are able to extract the necessary speech signal information from recordings made in acoustically uncontrolled field conditions, and that data should not be rejected as unusable until hypotheses relating to vocal tract masking are tested. Of course, not every field recording is usable. In this case, it was found that 20% of the recordings were unacceptable for acoustic analysis, due to noise interference or a weak signal, leaving 192 subjects of the initial 240 for acoustic comparison.
Figure 2. Vancouver Vowel Distributions: Middle-aged MWC Women.
Figure 3: Vancouver Vowel Distributions: Middle-aged UWC Women
Figure 4. Vancouver Vowel Distributions: Middle-aged LMC Women.
Figure 6. Vancouver Vowel Distributions: Middle-aged MWC Men.
Figure 15. Vancouver Vowel Distributions: Older UWC Men.
Figure 16. Vancouver Vowel Distributions: Older LMC Men.
Figure 17. Vancouver Vowel Distributions: Older MCM Men.
Robert J. Gregg  
Biographical Note

The late Robert J. Gregg (1912-1998) was born in Larne, County Antrim, Ireland and 
grew up there at a time when the Scotch-Irish dialect of the region was a living, thriving 
language. His academic education was begun as a student in the Honours School of 
Modern Languages (French and German) at the Queen's University of Belfast. For his 
doctoral degree at the University of Edinburgh he specialized in the field of dialectology 
related in particular to the dialects of the province of Ulster. A continuing interest in the 
study of these dialects formed the background to his early career in the teaching of 
foreign languages.

On coming to Canada in 1954 he was appointed to the faculty at the University of 
British Columbia, first teaching in the Department of French (later Romance Studies), 
then in the Classics Department, where he looked after the Division of Linguistics, 
finally settling in the newly created Department of Linguistics, of which he became 
Head in 1972. As evidenced by his publication list below, Dr. Gregg maintained a 
lifelong interest in both Irish and Canadian dialectology. He was a fine teacher and 
respected researcher, whom the University of British Columbia honoured as a 
Professor Emeritus in 1978.

Publications

Note: See also SVEN-related publications in the reference list of this volume.

September, 24-25.


1957. Introduction to the Pronunciation of French, with Phonetic Texts. Vancouver, 
B.C.: University of British Columbia, Department of Romance Studies.

1957. Second Year University French: A Correspondence Course. (With J.G. Andison.) 
Vancouver, B.C.: University of British Columbia, Department of University 
Extension.

1958. “Notes on the Phonology of a County Antrim Scotch-Irish Dialect (Part I, 
Synchronic Phonology).” ORBIS: Bulletin Internationale de Documentation 
Linguistique December, 392-406.

Internationale de Documentation Linguistique December, 582-584.

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1972. "Linguistic Change Observed: Three Types of Phonological Change in the Scotch-Irish Dialects" in Proceedings of the Seventh International Congress of


Notes on Contributors

Gaelan Dodds de Wolf

A member of the SVEN research team, Gaelan Dodds de Wolf is a researcher and consultant who taught Canadian English at the University of Victoria. She is an author/editor of the 1997 Gage Canadian Dictionary (de Wolf, Gregg, Harris and Scargill), a major revision of the 1983 edition by Avis, Drysdale, Gregg, Neufeldt, and Scargill. She is also the author of the book Social and Regional Factors in Canadian English: A Comparison of Phonological Variables and Grammatical Items in Ottawa and Vancouver (Toronto: Canadian Scholars’ Press, 1992) and a number of articles that utilize urban dialect data from the Woods (1979) and Gregg (1984) surveys. Currently retired, Dr. de Wolf is engaged in community activities as a volunteer.

John H. Esling

John H. Esling is Professor of Linguistics at the University of Victoria. His research and teaching interests centre on the auditory, articulatory and instrumental identification of voice quality, the effect of pharyngeal and laryngeal articulation on vowel quality, and the acquisition of phonetic production in infants. He was Secretary of the International Phonetic Association from 1995-2003 and is now Editor of the Journal of the IPA. He has also developed audio and video databases for phonetics and linguistic education.

Erika L. Hasebe-Ludt

Erika L. Hasebe-Ludt, PhD (University of British Columbia), MA (Freie Universität Berlin), is an associate professor of teacher education in the Faculty of Education at the University of Lethbridge. She teaches and researches in first and second language literacy, culture and curriculum studies. She is interested in autobiographical and cosmopolitan discourses of teaching. Together with Wanda Hurren, she is co-editor of Curriculum intertext: Place/language/pedagogy.

Margaret Murdoch

A member of the SVEN research project and a former teacher in German at the University of British Columbia, Margaret Murdoch has presented papers at various national and international conferences, including Methods in Dialectology III, IV and V. She is currently engaged in historical research in Quebec and England.
D.J. Richards

D.J. Richards analyzed the "Attitudes and Awareness" section of SVEN while she was a PhD candidate at UBC. She also used SVEN as a basis of her doctoral dissertation "Prestige and Standard in Canadian English" (completed 1988). She next taught English, Communications and Creative Writing at Trinity Western University, and since leaving that post, has written two children’s books, both published by Borealis Press, Blue: Little Cat Come Home to Stay (2000) and No Place for a Child (2002).

Lilita Rodman

Lilita Rodman was a member of UBC’s English Department between 1969 and 2002, teaching technical and business writing, Canadian literature, the structure of English, and dialectology. She worked with R.J. Gregg on the Survey of Canadian English. In addition to studying Canadian English, she has published numerous articles and a textbook on technical communication.
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This volume serves as an introduction to one of the most extensive sociolinguistic studies ever undertaken in the English-speaking world, the Survey of Vancouver English. It is also a tribute to the enormous energy and learning of Robert J. Gregg, who directed the project.

Robert J. Gregg (1912-1998)

“This book is a testimony to Robert Gregg’s tireless and meticulous work in social dialectology, particularly in the field of Canadian English. It is also a wonderful acknowledgement of the research and publications of the students and colleagues he trained and inspired during his many years as Professor of Linguistics at the University of British Columbia.”

Bernard Saint-Jacques