

Papers
from the
Fourth Annual Meeting
of the
Atlantic Provinces Linguistic Association

University of New Brunswick
Fredericton NB
12-13 December 1980

Actes
de la
Quatrième Réunion Annuelle
de
l'Association de Linguistique des Provinces Atlantiques

Université du Nouveau Brunswick
Fredericton NB
1e 12-13 décembre 1980

Edited by / Rédaction
A. M. Kinloch and A. B. House

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Acknowledgment

The Atlantic Provinces Linguistic Association would like to acknowledge the help of the Social Sciences and Humanities Research Council of Canada in enabling Professor J. K. Chambers to attend the Fourth Annual Meeting as guest speaker. It would also like to acknowledge the generosity of the University of New Brunswick in hosting the conference and in providing a grant towards the publication of this volume.

Remerciements

L'Association de Linguistique des Provinces Atlantiques veut bien exprimer sa reconnaissance au Conseil de Recherches en Sciences Humaines du Canada pour l'avoir mise à même de faire assister M. le professeur J. K. Chambers à la quatrième réunion annuelle en qualité d'orateur invité. L'Association veut aussi exprimer sa reconnaissance à l'Université du Nouveau Brunswick pour son chaleureux accueil de cette réunion ainsi que pour son subvention qui a bien aidé à la publication de ce volume.

PREFACE

The Association, its Meetings, and its
Publications: A Bio-bibliographical Note

A. M. Kinloch
University of New Brunswick

The Association has held four Annual Meetings:

1977 ¹	Mount Saint Vincent University
1978	Mount Saint Vincent University
1979	Université Sainte Anne
1980	University of New Brunswick

Each meeting was generously supported by the host university and the Association is grateful for the support it has received.

The Association produces three publications. These are:

The Journal of the Atlantic Provinces Linguistic Association/Revue de l'Association de Linguistique des Provinces Atlantiques

Papers from the...Annual Meeting of the Atlantic Provinces Linguistic Association/Actes du...Colloque Annuel de l'Association de Linguistique des Provinces Atlantiques. The dots represent the words Second/Deuxième etc

The Newsletter [of the Atlantic Provinces Linguistic Association]

These three are known respectively as JAPLA/RALPA (or either of these), PAMAPLA/ACAALPA (or either of these), and the Newsletter. All three are bilingual, i.e., they will accept submissions in English or French with equal readiness. All three owe much to the generosity of the universities in the Atlantic Provinces; without that generosity the Association could not function as it does.

The relationship between the papers presented at the Annual Meetings and the Association's publications is as follows:

The 1977 Annual Meeting: all that were published of the papers presented at this meeting appeared in JAPLA 1 (1978) [ed. George W. Patterson].

JAPLA 2 (1980), ed.-in-chief W. T[errence] Gordon, ISSN 0706-6910, contained contributions invited from scholars in linguistics.

The 1978 Annual Meeting: all that were published of the papers presented at this meeting appeared in PAMAPLA 2, ed. George W. Patterson [(Halifax, N.S.: Mount Saint Vincent University, [1979])].

The 1979 Annual Meeting: all that were published of the papers presented at this meeting appeared in PAMAPLA 3, ed. Moshé Starets (Church Point, N.S.: Université Ste. Anne, [1980]).

The 1980 Annual Meeting: all but two of the papers presented at this meeting appear in this present volume, PAMAPLA 4, ed. A. M. Kinloch and A. B. House (Halifax, N.S.: Atlantic Provinces Linguistic Association, Inc., 1981).

It is noteworthy that there never was a PAMAPLA 1; what would have been its role was filled by JAPLA 1.

The Newsletter is edited, produced, and distributed single-handedly by John A. Barnstead. Volume 1, nos. 1 through 3, appeared throughout 1979. Volume 2, nos. 1 through 3, appeared throughout 1980.

Notes

1. The date of this meeting was inadvertently and erroneously given as 1978 in JAPLA, 1 (1978), 2.

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The following papers, not printed here, were also presented at the Fourth Annual Meeting of the Atlantic Provinces Linguistic Association:

Les discours suivants, non ci-inclus, étaient donnés à la Quatrième Réunion Annuelle de l'Association de Linguistique des Provinces Atlantiques:

- George W. Patterson. Evidence of Morphological Conditioning of Phonemic Evolution in Acadian
- Terrence J. Pratt. The Case for Direct Questioning in Dialect Fieldwork

EDITORIAL NOTE

The editors have confined themselves almost entirely to correcting obvious typos and slips in spelling, etc. They have made only a few alterations to the texts, and those only with the consent of the authors. The papers here printed are therefore almost exactly as they were received from their authors.

A. M. Kinloch

A. B. House

Editors

MODE DE REDACTION

Les rédacteurs se sont presque entièrement bornés à la correction d'erreurs dactylographiques évidentes et de fautes orthographiques. Ils ont apporté très peu de changements dans les textes et ceux seulement auxquels les auteurs se sont accordés. Ainsi sont les articles ici imprimés en presque la même forme que celle que leur ont donnée leurs auteurs.

A. M. Kinloch

A. B. House

Rédacteurs

Linguistic Variation and Chomsky's "Homogeneous Speech Community"*

J. K. Chambers

University of Toronto

"Everyone knows that language is variable," said Edward Sapir, many years ago (1921: 147). But if everyone knew it, few linguists gave it as much consideration as Sapir, and ironically, in his practice, even he was scarcely better prepared to incorporate insights about it into linguistic analysis than his predecessors had been, or than his immediate successors were. It is true, of course, that Sapir was more willing than most of the others to acknowledge variation, to cite evidence for the loose ends of a particular analysis, and to conclude that, as a result of variation, "unfortunately, or luckily, no language is tyrannically consistent. All grammars leak" (1921: 38). This response to the fact of variation in language is little more than a token. That he persistently made mention of it, as an addendum to linguistic analysis that sometimes overshadowed the analysis itself, was hardly considered commendable by some of those who immediately followed him. Thus Joos summarized Sapir's contribution by saying, "We welcome the insights of his genius, which allowed no scrap of evidence to escape at least subconscious weighing; where it is possible to check up, we normally find him right; thus we may seem captious when we point out that he also said many things which are essentially uncheckable ('invulnerable') and not science" (1957: 25). The particular view of 'science' and the narrowing of the data appropriate for it perhaps forestalled any significant movement to account for variability within linguistic theory as an immediate response to the "insights of his genius." Indeed, that movement is only now beginning to take shape.

1. Variability and Chomsky's idealization

Current research in linguistics includes, among many other aspects, a multi-faceted approach to the fact of linguistic variation. So diverse are the approaches, co-existing as they do amidst so much other research activity, that they have yet to be identified as a unified movement. The approach that is best established is usually called 'sociolinguistics', which takes its lead from the work of William Labov (1966), pursuing the social and stylistic correlates of linguistic variation; the analysis presented

in this paper is in that framework. There are, however, many other branches as well, including the semantics of gradient denotata (Kay and McDaniel 1978), the geolinguistic diffusion of language change (Chambers and Trudgill 1980), the formal representation of variable rules (Sankoff and Labov 1979), and many more. What all of these branches have in common is the attempt to analyse linguistic data in a framework which is gradient rather than discrete, and variable rather than categorical.

The theoretical thrust toward making variability manageable is, moreover, not an idiosyncrasy of current linguistics. Indeed, the thrust in linguistics (and in every other discipline) lags well behind that of the physical sciences, where notions of relativity and complex space-time interactions are by now commonplace. But linguistics shares its growing predilection for variability with human geography, in which indices of well-being are more important than measures of precipitation, and social attitudes are variables of greater consequence than physical altitudes. Even in mathematics, venerably the categorical discipline par excellence, variability is increasingly recognized, especially in fuzzy set theory, which replaces the classical notion that a unit either is or is not a member of a set by the notion that it is a member to some degree. The result of this kind of work in linguistics, geography, mathematics, and other disciplines might well be an intellectual current that will eventually revolutionize all the physical and human sciences.

However, in the rush toward acceptance of the new paradigm in linguistics, there exist already some indications of a naive reaction directed against the categorical linguists. The assumption seems to be that any research into a real situation which includes variability precludes any idealization away from the situation. Thus stated, the fallacy in the assumption is perhaps obvious, since it is widely recognized that generalizations and hypotheses are themselves idealizations of sorts, necessarily abstracting the theoretical consequences from the real situation to which the data belong. Without generalizations and hypotheses, we are left with the data alone, which can be enumerated but not categorized, and certainly not elucidated. Such a stance is obviously inimical to science, and it is hard to believe that anyone would seriously advocate it. Nevertheless, some of the recent criticisms directed against Chomskyan linguistics can certainly be construed as taking this stance. It seems to me that most of those criticisms are perpetuated only by virtue of their own superficiality, for none of them (to the best of my knowledge) have been developed far enough to be properly characterized as 'critiques', and it is likely that if they were developed further and taken more seriously by their own proponents, they would expose their inherent naivety. Instead, they have consisted largely of citations of Chomskyan idealizations in contexts which are intended to deride the citations. More often than not, the citation has been Chomsky's famous statement at the beginning of Aspects of the Theory of Syntax (1965: 3):

Linguistic theory is concerned primarily with an ideal speaker-listener, in a completely homogeneous speech-community, who knows its language perfectly and is unaffected by such grammatically irrelevant conditions as memory limitations, distractions, shifts of attention and interest, and errors (random or characteristic) in applying his knowledge of the language in actual performance.

To some students of linguistic variation, this idealization has been received as if it excluded their own research from the domain of linguistic theory, but any such exclusion does not follow from the statement itself. Chomsky has recently characterized this statement as "an innocent and uncontroversial statement of an idealization" (1980: 24), but in view of the reaction it has elicited, he acknowledges that, however innocent it might be, it is certainly not uncontroversial. In his discussion of the objections to it (1980: 25), he makes the following points:

Exactly what is the source of the objection? Obviously, it cannot be that real speech communities are not homogenous. That is as obvious as it is irrelevant. Nor can the objection be that this idealization necessarily impedes the study of matters that do not fall within it, say, linguistic variation, or what Putnam calls 'the social division of linguistic labor'. On the contrary, what is implicitly claimed by someone who adopts the idealization is that these further questions are properly studied within a framework that makes use of the results obtained by inquiring into the idealization. If the idealization does make it possible to unearth real and significant properties of the language faculty, this conclusion would seem to be justified, indeed inescapable.

Chomsky's main point here, that studies of variation can best proceed from the adoption of the idealization, seems to me to be essentially correct.

In what follows I demonstrate its correctness, arguing from a case study of linguistic variation in North Toronto, which is an electoral riding in Toronto proper that protrudes into the boroughs of York and North York, in the core of metropolitan Toronto. In the next section, I introduce the linguistic variable (aw) and show that the data, even for the middle class adults for whom (aw) is a 'stable' linguistic feature, fail to conform to the idealization. Subsequent sections show that for younger speakers in North Toronto the variable (aw) is undergoing a change, resulting in a rather spectacular amount of phonetic variation. The phonetic variation correlates with independent variables such as age and sex, and also with phonetic conditioning. Throughout the elucidation of the variation for (aw), an analysis of the process in terms of the idealization provides a sufficient and perhaps necessary basis for its explication, as I shall point out.

2. Variable (aw) in North Toronto

The variable (aw) designates the diphthong which in phonemic representations of English has usually been represented by the symbol /aw/, and in historical accounts is characterized as the modern reflex of Middle English ū. In other words, it is the nucleus in words like house, houses and how. Most linguists will recognize that this nucleus is one which, along with the vowel of wife, wives and why, is susceptible in Canadian English (and some other varieties) to the rule which has been called, perhaps controversially, 'Canadian Raising'. That is, these nuclei have higher onsets before voiceless consonants than in other environments, phonetically [ʌw] as opposed to [aw], and [ay] as opposed to [ay]. This latter diphthong--the front-gliding one--will not be considered in what follows, because its phonetic variation in present-day North Toronto is stable, conforming to the phonetics just described. However, the back-gliding diphthong is realized now by several other phonetic variants, and clearly has become a linguistic variable. An indication of the range of phonetic variation is given in Table 1, which lists the vowel nuclei in six recurring words for two of the subjects interviewed in North Toronto. Both subjects are middle class (MC) and female (F). One of them, Elizabeth, is 22 years old (Y = young adult), and the other, Diane, is twelve years old (K = pre-teen, or (mnemonically) 'kid'). Their vowel responses are laid out in Table 1 as if on a vowel chart, with degrees of fronting and, wherever useful, of height shown.

	Elizabeth (MCYF#2)	Diane (MCKF#2)
1. house	<div style="text-align: right;">ʌw</div> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <div style="display: flex; justify-content: space-around;"> æw aw </div>	<div style="display: flex; justify-content: space-around;"> ɐw ʌw </div> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/>
2. out	<div style="text-align: right;">ʌw</div> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <div style="text-align: center;">aw</div>	<div style="display: flex; justify-content: space-around;"> ɐw ʌw </div> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <div style="text-align: center;">æw</div>
3. houses	<div style="text-align: center;">æw</div>	<div style="text-align: right;">aw</div>
4. down	<div style="display: flex; justify-content: space-around;"> æw aw </div>	<div style="display: flex; justify-content: space-around;"> æw aw </div>
5. now	<div style="display: flex; justify-content: space-around;"> æw aw </div>	<div style="display: flex; justify-content: space-around;"> æw aw </div>
6. how	<div style="text-align: center;">aw</div>	<div style="display: flex; justify-content: space-around;"> aw aw </div>

Table 1--List of vowel responses for two speakers in six words, with the frontness of vowels (front, front-central, and central) indicated, and, for house and out, the height of the vowels (low, and mid) also indicated.

Table 1 displays considerable variety by almost anyone's expectation, but even this does not exhaust the variants which are actually found. If one were to cull all of the variants for all of the younger people in the survey, all of the empty cells in Table 1 could be filled (although perhaps not by restricting the list of variants to these six words alone). Suffice it to say, for now, that all of the variants indicated by the cells of Table 1 do occur.

The source of data in Table 1 and throughout the rest of this paper is a survey of 24 lifelong or long-standing residents of North Toronto which I did in 1979-80. The interviews, which were tape-recorded, followed the format by now familiar in urban dialect surveys, with the reading of a word list, the reading of a passage of connected prose, and a free discussion of several topics; these three tasks elicit different contextual styles of speech, hereafter termed word list style (WL), reading passage style (RP), and interview style (IS), respectively. (The interviews also included a brief discussion of a short list of vocabulary items, reminiscent perhaps of interviews in dialect geography, but these will not enter into the issues discussed in this paper; for an indication of the vocabulary survey, see Chambers 1981). Eleven of the interviews were conducted by Susan Bird, four by Alison Chambers, and the rest by me; the analysis of all of the tapes was done by me, to ensure comparability of the phonetic norms for all of the data.

The participants in the survey were selected according to a set of social variables, thus controlling the independent parameters of the investigation. All participants, as mentioned already, are lifelong or long-standing residents of North Toronto. They belong to one of three age groups: adults (A) in their early fifties; young adults (Y) about 22 years old; and pre-teens (K) about twelve years old. Each age group is represented by six members who are middle class (MC), and in addition there is a group of six working class (WC) pre-teens. (The working class group does not figure prominently in the analysis which follows because of evidence that ethnicity cuts across and apparently vitiates any meaningful entity called 'working class' in a city as cosmopolitan as Toronto; this aspect of the North Toronto survey requires a separate study.) Each age group is divided equally according to sex (M,F). These social parameters are shown as a grid in Table 2 on page 6 along with the individual identifiers (e.g., MCAF#2 = middle class, adult, female interviewed second) and the names by which they will often be identified in the text.

MIDDLE CLASS

Adult (50+)	M	MCAM#1 Mr. T.	MCAM#2 Mr. H.	MCAM#3 Mr. J.			
	F	MCAF#1 Mrs. B.	MCAF#2 Mrs. T.	MCAF#3 Mrs. J.			
Young adult (22)	M	MCYM#1 Grant	MCYM#2 Peter	MCYM#3 Stanley			
	F	MCYF#1 Anne	MCYF#2 Elizabeth	MCYF#3 Bev	WORKING CLASS		
Pre- teen (12)	M	MCKM#1 Mark	MCKM#2 Tim	MCKM#3 Tommy	WCKM#1 Orazio	WCKM#2 Mauro	WCKM#3 Billy
	F	MCKF#1 Alice	MCKF#2 Diane	MCKF#3 Kerry	WCKF#1 Emilia	WCKF#2 Sharron	WCKF#3 Michele

Table 2--Participants in the survey of North Toronto, showing the social parameters of class, age and sex.

In order to make a comparison between an analysis of the phonology done under the assumption of Chomsky's idealization and the variation actually found in North Toronto, we first need an analysis in terms of generative phonology. Fortunately, there is no need to construct such an analysis purely for this purpose, which would lead to the possibility (however unintentional) of distorting the analysis for purposes of the comparison. The analysis already exists as part of the study of Canadian Raising (Chambers 1973), and all that is required is to extract from that work the elements which are relevant to the back-gliding diphthong. The phonological rule is as follows (1973: 127):

(1) Canadian Raising

$$[+tense] \xrightarrow{V} [-low] / \text{ ____ } \text{GLIDE} \xrightarrow{C} [-voice]$$

There is also a fairly complex condition attached to the rule which blocks its application when the vowel occurs in a particular intonation contour, as in citation and titanic as opposed to cite and titan. However, that part of the analysis, which has recently been reanalysed in a framework which includes autosegments and syllabification (Paradis 1980), can fairly be left out because none

of the actual data from the survey meet the condition anyway. So can most of the other issues which have arisen from the formulation within the generative framework, such as relative chronology (King 1972, Picard 1977), analogical leveling (Kiparsky 1974: 333), and rule inversion (Gregg 1973, Chambers 1979: 197-202). For our purposes, we need only consider what is the essential claim of rule (1) as it applies to the back-gliding diphthong, namely, that the vowel occurs as [ʌw] before a voiceless consonant and as [aw] elsewhere. Transliterated into segments, the part of rule (1) which is of interest in what follows is this statement:

(2) aw --> ʌw / _____ voiceless
consonants

Rule (2) predicts that the nuclei which will be found in a place like North Toronto will be these two: [ʌw] will occur before voiceless consonants, as in house and out, and [aw] will occur before voiced consonants, as in houses and down, and also finally, as in how and now. One need only look at Table 1 to get an idea of how the prediction fails for the younger speakers. However, any idea based on that kind of impression is meaningless. To make the comparison meaningful, we need an indexing system for the predictions made by rule (2) which will match the indices associated with the analysis of data from the survey.

The indexing system, following the usual procedure in urban dialect surveys, will assign a score of 0 (zero) to occurrences of vowels which are predicted by rule (2). As a result, any speaker whose speech includes only those vowels will receive a score of 0. On the other hand, occurrences of vowels which are not predicted by rule (2) will be assigned an index of 1, or, when there are determinable degrees of deviance from the predicted vowel, the nearer vowel will be counted as 1, the next nearer as 2, and so on. In this way, an index score can be determined for each individual or sub-group in the survey, and the scores can be compared explicitly.

Actually, the phonological situation for (aw) is somewhat more complicated than is typical in other studies of variables. In the first place, rule (2) makes two different predictions about the vowel nuclei that will occur. It claims that the vowel onset will be central, i.e., either [a] or [ʌ], rather than either front-central, i.e., [a] or [ɐ], or front, i.e., [æ] or [ɛ]. The scores for this kind of phonetic variation will be referred to as the fronting index. And it also predicts that the vowel will be mid, i.e., [ʌ], before voiceless consonants, and low, i.e., [a], elsewhere. The scores for this kind of phonetic variation will be referred to as the raising index. Logically,

this prediction about vowel height admits of two separate possibilities: onsets predicted to be mid (i.e., before voiceless consonants) might actually occur low, and onsets predicted to be low (i.e., elsewhere) might actually occur as mid. If both of these possibilities occurred, the indexing system would be even more complicated, because we would require a raising index to account for the former cases and a lowering index to account for the latter cases. However, an inspection of the data shows that the latter possibility does not occur at all--significantly, there is not a single instance in the more than 3,000 tokens for (aw) where it occurs as mid when it is predicted to be low. By contrast, there are many instances where the vowel is low when the rule predicts that it should be mid. This fact alone seems to provide a striking confirmation of the claim, implicit in rule (2), that the low vowel is phonemic or underlying, and concomitantly striking confirmation of the claim that the rule is correctly formulated as a raising rule rather than as a lowering rule, an aspect of the analysis of Canadian Raising that has been the source of some controversy. For the time being, however, its significance will be confined to the fact that it simplifies the indexing system. It is important to note that what the raising index actually measures is the failure to raise the onset before a voiceless consonant.

Taking all of these factors into account, we devise the indices as follows. Starting with the raising index, which is simpler because it requires only two values (0, 1) in each of the phonological environments, we assign the values to the phonetic variants as follows:

(3) Raising index

Before voiceless consonants: (aw)-0 = [Λ w], [ɛw], [ɛw]

(aw)-1 = [aw], [aw], [æw]

Elsewhere: (aw)-0 = [aw], [aw], [æw]

(aw)-1 = [Λ w], [ɛw], [ɛw]

Thus a speaker who has [Λ w] in house and [aw] in houses, the nuclei predicted by rule (2), will be assigned an index of 0 for each, giving him or her a score of 0 overall.

Similarly, the fronting index will assign a value of 0 to a central vowel (whether mid or low), 1 to a front-central vowel, and 2 to a front vowel. We assign the values to the phonetic variants as follows:

(4) Fronting index

central: (aw)-0 = [Λw], [aw]

front-central: (aw)-1 = [ɛw], [aw]

front: (aw)-2 = [ɛw], [æw]

Again, a speaker who has the nuclei predicted by rule (2) in house and houses will again be assigned an index of 0 for each, making a score of 0 overall.

The score for a speaker who deviates maximally from the predictions of rule (2) and therefore is assigned the highest index in all cases would be the maximum score, 100 (= 1.0), for the raising index, where only two phonetic grades occur, but would have 200 (= 2.0) for the fronting index, where three phonetic grades occur.

Because of the seeming complexity of this indexing system, it is probably useful at this point to develop an example of its application in more detail, before getting on to the substance of this paper where the indices are presented in some profusion. Table 1 on p. 4 provides a limited sample of real data which will serve our purpose here. The computation of the raising index requires separating the tokens according to the phonological environment following the diphthong (i.e., house, out vs. the other words), and assigning a value to each occurrence (i.e., house occurs three times, out occurs twice, etc., for Elizabeth) according to the index shown in (3). Similarly, the computation of the fronting index proceeds by assigning the appropriate values shown in (4) to each token. The computation for Elizabeth is given in Table 3 on page 10.

The indices shown for Elizabeth in Table 3 are, of course, illustrative only, and not valid for any purpose other than the exposition of the mechanics of the indexing system, because the data are selected rather than complete.

The utility of such indices, which is perhaps obvious, is that they provide an explicit basis for comparisons at various levels. A raising index of 27, for example, reveals a degree of deviation from 0, which is predicted by rule (2). That deviation is not great, given that a maximum deviation of 100 is possible, but it is certainly significant. A fronting index of 118, by the same interpretation, reveals a degree of deviation from rule (2) in another dimension, and the deviation is

Computation of the raising index for Elizabeth

Before voiceless consonants: 5 tokens total

(aw)-0 occurs in 2 tokens: $0 \times 2 = 0$

(aw)-1 occurs in 3 tokens: $1 \times 3 = 3$

Elsewhere: 6 tokens total

(aw)-0 occurs in 6 tokens: $0 \times 6 = 0$

(aw)-1 occurs in 0 tokens: $1 \times 0 = 0$

$$\text{RAISING INDEX} = \frac{\text{total score}}{\text{total tokens}} = \frac{3}{11} (\times 100) = 27$$

Computation of the fronting index for Elizabeth

Total tokens: 11

(aw)-0 occurs in 2 tokens: $0 \times 2 = 0$

(aw)-1 occurs in 5 tokens: $1 \times 5 = 5$

(aw)-2 occurs in 4 tokens: $2 \times 4 = 8$

$$\text{FRONTING INDEX} = \frac{\text{total score}}{\text{total tokens}} = \frac{13}{11} (\times 100) = 118$$

Table 3--Sample calculation of the raising index and the fronting index based on the limited data shown for Elizabeth (MCYF#2) in Table 1.

considerably greater, and more significant, relative to the maximum possible deviation of 200. These indices also find a natural interpretation in terms of "phonetic space," an aspect of such calculations which so far has only been exploited in the work of Trudgill (1974: 115-29), although it is implicit in other studies. That is to say, a raising index of 27 indicates that the height of the vowel is actually low when it is predicted to be mid in slightly more than a quarter of the tokens; and a fronting index of 118 indicates that the vowel onset is normally front-central (index 100) and occasionally front.

We are now in a position where we can begin to look more closely at the real data from the North Toronto survey, beginning with the results for the adult group, which approximate most closely the behaviour predicted by rule (2). As the analysis of the data unfolds, it will become obvious, as it already is obvious in the exposition of the indexing system, that the prediction of rule (2), incorporating the idealization of the speech community, provides the basis for the calculations and comparisons which make the mass of data meaningful.

3. Variable (aw) and adults in North Toronto

The generative study of Canadian Raising did not include, of course, any explicit notion of such independent variables as social class, age or sex. However, the data on which it was based were not simply fabricated either. Instead, they were determined by my intuitions about my own speech and the speech of my acquaintances, which is the usual procedure for data-gathering in generative phonology. We might expect, then, that the predictions made by rule (2), if they hold at all, will hold most realistically for those participants in the North Toronto survey who most closely match my own social situation. Indeed, for the middle class adults in the survey the idealization of the homogeneous speech community might even prove to be not much of an idealization at all insofar as the generative analysis was based on reliable intuitions rather than mistaken ones. This is exactly what shows up when the middle class adults are isolated and studied separately: for most of them, most of the time, the predictions of rule (2) hold. They do not, however, hold for all of them all of the time. In other words, the idealization can be clearly shown to be just that, an idealization, where the speech of the middle class adults is concerned, but the extent to which it 'levels' or overlooks variability is insignificant enough that it does not falsify or vitiate the analysis. (If it were so falsified or vitiated, needless to say, it would be useless as the basis for the indexing system, or for any other purpose.)

First, to what extent do the middle class adults in North Toronto use the vowel heights predicted by rule (2)? Figure 1 on p. 12 displays the raising indices for each of the individual adults along the ordinate. On the abscissa, the indices are broken down for contextual styles, from the most formal word list style (WL), through the less formal reading passage style (RP), to the still less formal free conversation or interview style (IS).

Recalling that rule (2) predicts that each speaker will have a raising index of 0, and thereby range along the abscissa

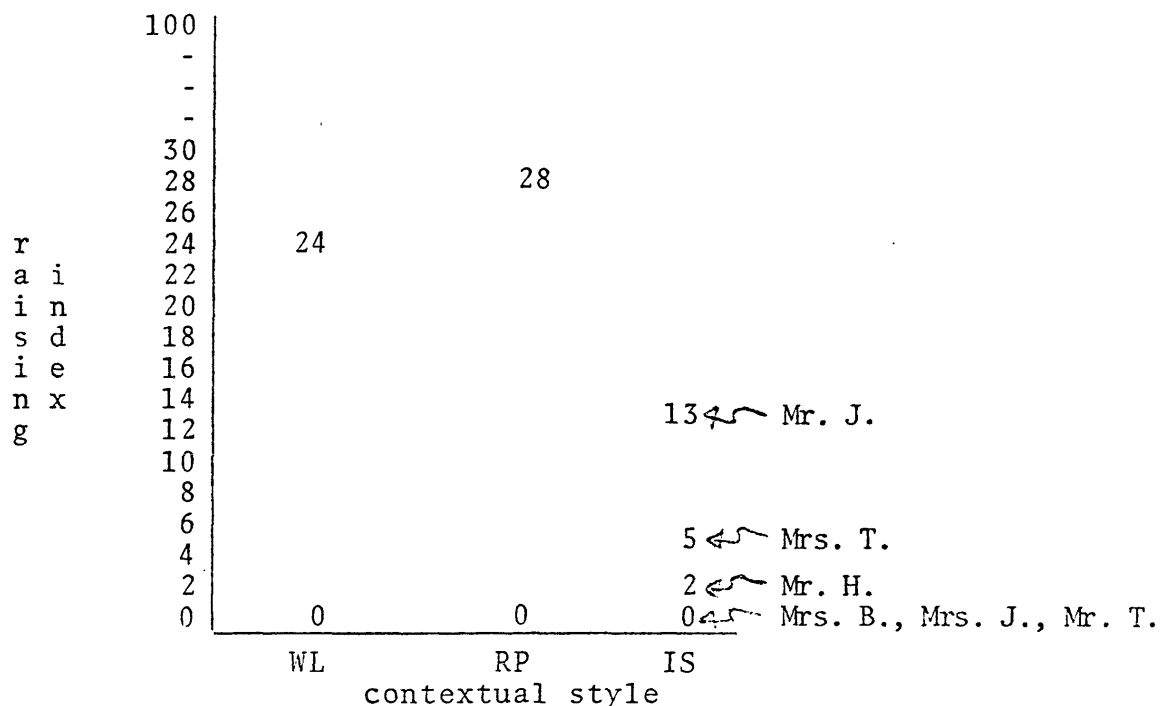


Figure 1--Vowel height deviations from the predictions of rule (2) by middle class adults.

of Figure 1, we can see that its prediction with respect to vowel height for this social group is nearly perfect. Three of the six speakers do indeed range along the abscissa, and two of the others show virtually negligible deviation, restricted to the most casual style. Indeed, Figure 1 would probably not be worthy of display if it were not for the presence of the indomitable Mr. J., who seems to be marching to a different drummer. Mr. J. differs from the others in two respects which deserve mention: first, his indices in all styles are higher than those of his peers, and secondly, his index in the least formal style actually decreases where for all the others the indices increase or stay the same. For the first of these aspects, it is possible to overemphasize the extent of Mr. J.'s deviance from the others by looking superficially at Figure 1, because the calibration of the raising index along the ordinate is quite fine, and Mr. J.'s indices, in an absolute sense, fall generally into the lowest quarter of the range. Nonetheless, the phonetic difference which the indices represent for Mr. J.'s speech do constitute a noticeable difference, even to a linguistically naive listener, or at least to one

who is in intimate contact with him. Toward the end of Mr. J.'s interview, his wife, who has been sitting by throughout it, tells the interviewer, "He's got the tiniest bit of a drawl to his voice." Her description of nonraising as a "drawl" is in accord with an observation made about Canadian English almost forty years ago by Martin Joos in the first article to describe this alternation, when he says: "I can lengthen a high diphthong if I choose, and an Ontario listener notices nothing wrong; yet if I use a low diphthong before a fortis consonant, no matter how short I make it--and it is my habit to make it very short--the Canadian listener immediately accuses me of drawling" (1942: 142). The likely cause of Mr. J.'s "drawl" is not hard to find: he was born in New York and moved to North Toronto at the age of eleven, in 1936. If it seems unlikely that he should have retained any American features in his speech from such an early age, that factor is at least partly mitigated by the fact that he is perhaps the most positive of all the participants about the effects of "Americanization" in Canada. (Part of the free discussion in the interviews dealt with Americanization, but the correlation of sociopolitical attitudes to the linguistic change will not be discussed in any detail in this paper.) In any event, his wife attributes his distinctive speech pattern to his American origins, saying, "I think he has just a shade of an American accent of some kind or other." She is probably right, both about its origin and about the miniscule effect it has on his accent.

The other aspect of Mr. J.'s speech, his decrease of the index in the least formal style, may be a further indication of his positive feelings for his American origins. It is in the more self-conscious styles of speech (WL and RP) that he differs most from his peers, suggesting that he exercises some degree of control over the differentness of his accent. In the less self-conscious conversational style, the gap between Mr. J. and the others narrows considerably.

Apart from Mr. J., the middle class adults in North Toronto conform quite nicely to the prediction of vowel height by rule (2). The slight deviance that is found may be reckoned within the bounds of any performance of speech in a social situation.

By contrast, the predictions of rule (2) with respect to the centrality of the vowels is less exact, as we shall see immediately, and the cause of the deviance is much more interesting.

The fronting index, as we have seen, provides a calculation for the centrality of the onset of the diphthong, with central [ʌ] and [ɑ] pegged as 0. Speakers who have only central onsets, as predicted by rule (2), will thus be represented along the abscissa. Table 4 and Figure 2 on p. 14 show that

no individual among the middle class adults conforms perfectly, although three of them come very close to it.

style:	WL	RP	IS
Mr. T.	20	4	13
Mr. H.	10	8	16
Mr. J.	3	0	4
Mrs. B.	0	0	2
Mrs. T.	43	38	67
Mrs. J.	3	0	0

Table 4--Fronting indices for each of the middle class adults in each contextual style.

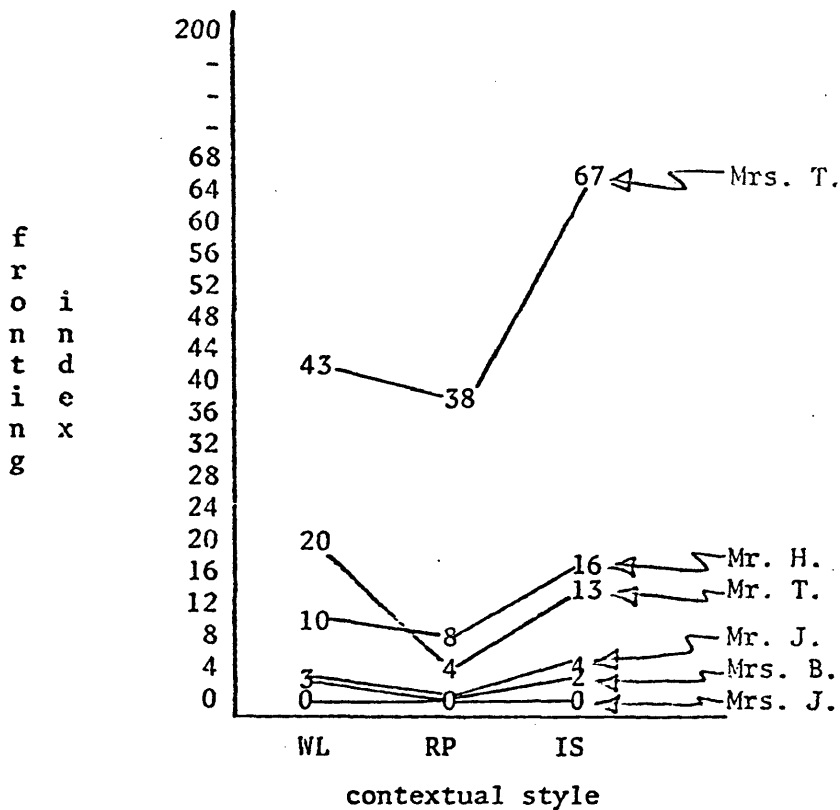


Figure 2--Vowel centrality deviations from the predictions of rule (2) by middle class adults.

The amount of fronting, while obviously greater than the discrepancies for vowel height represented in Figure 1, is nonetheless approximated fairly well by rule (2) for five of the six adults. For these speakers, the norms for vowel frontness are clearly central, i.e., closer to 0 than to 100, which is front-central. The deviations in frontness which occur for these five seem to fall well within the bounds of insignificant phonetic variation for this feature.

There are, however, two observations about nonconformity in Figure 2 which require some discussion. First is the unusual contour of the fronting indices with respect to contextual style. For all the speakers except Mrs. B., the fronting index is actually greater in the more formal Word List style than it is in the Reading Passage style; the index then typically increases again in the least formal style, as expected, leaving a more or less V-shape contour in the graphic representation. Several studies of urban dialects have established the fact that the normal and expected contour for a linguistic variable for which there is social awareness is one which rises from the lowest index in the most formal style to the highest index in the least formal style. Indeed, a version of this expected contour occurs in Figure 2 for Mrs. B. For the others, the only conclusion I can draw from the contour is a negative one, namely, that the fronting of (aw) is a variable which has not attained social awareness in the speech community. Since it is stratified socially (as we shall see in the next section) but not stylistically, it has status as an indicator rather than as a marker (Labov 1972: 178-79). But I must point out that such a conclusion follows only from the fact that the stylistic stratification in Figure 2 is irregular, and says nothing whatever about the apparent consistency of the V-shape in the indices. Nevertheless, the conclusion that variable (aw) is an indicator rather than a marker in Toronto English seems to me to be strongly confirmed by the fact that only two of the participants in the survey made any overt comments about this phonetic feature at all. Each participant was given an opportunity to do so near the end of the interview, when the interviewer asked if the participant realized what the interview was designed to investigate. When the participant said no (as all did), the interviewer then made a brief explanation, pointing out some of the words on the word list for eliciting variants of (aw). Even so, the participants normally had nothing to say about this linguistic feature, either making other, unrelated comments about language or simply changing the subject. The two who did comment on it were both adult women, and one of them was Mrs. B., whose variation in Figure 2 is characterized by stylistic stratification. On being told the purpose of the interview, Mrs. B. said, "All over the States they know we're from Canada from that, even though our accents are so simi-

lar....They notice the way we say about."1 Otherwise, no one showed any awareness at all of this feature.

The second observation about Figure 2 which requires discussion, of course, is the presence of Mrs. T., whose fronting indices are notably higher than those of her peers, even favouring a front-central onset in the most casual style more often than a central onset. From everything we have seen so far, Mrs. T. perhaps appears to be linguistically eccentric in this respect. However, in the light of what we will see in the next section, Mrs. T.'s linguistic behaviour finds an easy explanation. Put simply, she speaks like a younger person in Toronto with respect to (aw). Her indices are more like a thirty year old's than like her peers'. This is less than surprising when one knows that in her interview, Mrs. T., a working mother whose children have now grown up, relates freely and affably to the young woman who interviewed her, discussing such topics as Stevie Wonder, the ecology of using cloth napkins rather than paper serviettes, and sugarless diets. Her speech with respect to (aw), like some of the extralinguistic concerns she has, seems generally to reflect a younger person's behaviour.

The fronting indices represented in Figure 2 and the raising indices displayed in Figure 1 are based on the predictions of rule (2) in the sense that those predictions form the standard or norm against which the individual and group behaviour can be measured. For the middle class adults, rule (2) provides an obviously useful and valid idealization of linguistic behaviour: their actual production includes some phonetic deviations, usually slight and insignificant, from the idealized standard. With younger groups, the idealization will prove to be a much more distant approximation of linguistic behaviour because, as we shall see, a linguistic change is in progress in North Toronto, creating much greater phonetic variation for (aw). As we move on now to show the social and linguistic parameters of that change, the idealization will still prove to be functional, providing the basis for explicating the change that is taking place.

4. North Toronto (aw): change in progress

It is probably obvious by now that the range of phonetic variants displayed for Elizabeth (MCYF#2) and Diane (MCKF#2) in Table 1 is not characteristic of the middle class adults, male or female, whose variation with respect to (aw) was discussed in the preceding section. The fact that there exists considerably greater linguistic variety among younger people than among their parents' generation indicates that a linguistic change is in progress. Indeed my survey of North Toronto speakers took its impetus from

the observation that my children and their friends had a different range of variants for (aw) than I did. Of course, no accumulation of casual observations about my children and my acquaintances can reveal precisely the social and linguistic parameters of a change in progress. Society is too complex and the relative weight of potential conditioning factors is too subtle to trust to one's impressions. Fortunately, once a survey is done and its results are analysed, those parameters usually appear in bold relief, often surprising the linguist, who, inevitably, has formed some impressions of what those parameters will be. In the case of (aw) in North Toronto, the change is quite recent and only beginning to establish itself in the community. Nevertheless, even at this early stage, the parameters which carry the change emerge quite boldly. In this section, I define those parameters under three sub-headings: (4.1) fronting, not raising, is the key to the change; (4.2) females, not males, are leading the change; and (4.3) 'elsewhere' environments, not voiceless, are changing more rapidly. Of these three parameters, incidentally, only the second was anticipated correctly by me during several years of making casual observations; the other two only emerged in the analysis of more than three thousand tokens gathered systematically in the survey.

4.1 Fronting, not raising, is the key to the change.

Since there are two phonetic dimensions involved in the variation of (aw), it is clearly important to discover which of them is more crucial to the variation which actually occurs. In seeking an answer to this question, however, it is important to keep in mind that both dimensions are obviously involved in the change to some extent. Otherwise one of the two indices discussed above would simply be otiose, whereas the utility of both of them has already been suggested by Figures 1 and 2. Even a casual inspection of a miniscule sample of the data as in Table 1 shows that both are involved: the occurrence of front-central and front vowels as well as central is shown there, as is the occurrence of low vowels before voiceless consonants (which is what the raising index measures). Both are involved, beyond a doubt, and our question really resolves itself into asking whether both dimensions are contributing equally (in some sense) to the variation, or not. By way of answering this question, I will consider the behaviour of various social groups with respect to both fronting and raising, and evaluate the relative contribution in terms of the coherence of the behaviour in each case.

Looking first at raising, we can plot the behaviour of the three age groups (MCA/ adult, MCY/ young adult, and MCK/ pre-teen) graphically by arranging their collective raising indices against contextual style, as in Figure 3 and Table 5.

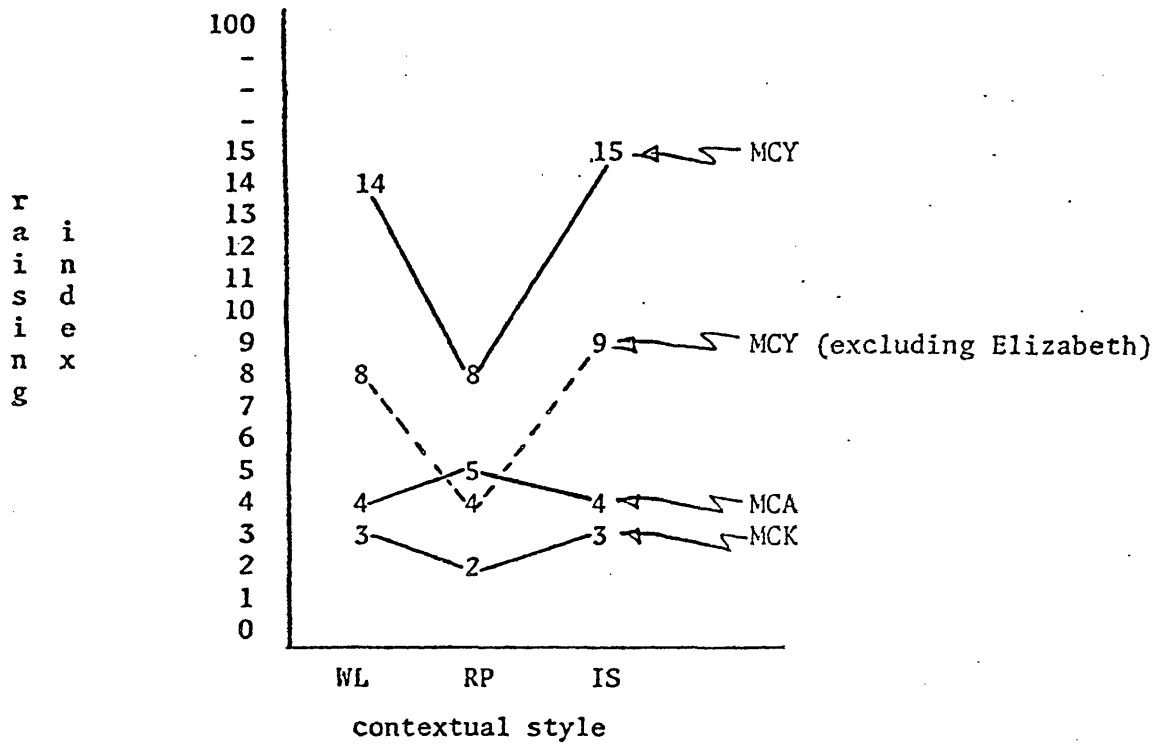


Figure 3--Raising by age and style

style:	WL	RP	IS
MCA	4	5	4
MCY	14	8	15
MCK	3	2	3

MCY (ex.Elizabeth)	8	4	9

Table 5--Raising indices by age and contextual style.

The results are incoherent no matter what aspect of the graph is examined. Instead of revealing a stratification of the groups corresponding to age, what we find is the older group interposed between the two younger groups. And instead of a regular response to raising in the contextual styles, we find an increase of the failure to raise in reading passage style for the adults but a slight decrease for the pre-teens and a significant decrease for the young adults. Moreover, the coherence of the raising behaviour does not ameliorate by any (more or less) reasonable attempts to re-work the results. For instance, the highest raising index in the entire sample belongs to one of the young adults, Elizabeth (MCYF#2). If one assumes, for the sake of argument, that Elizabeth's failure to raise is somehow aberrant and therefore prejudices the entire sample, one might allow for that by recalculating the young adults without her data. When that is done, as the broken line in Figure 3 indicates, the scores of the young adults are lower but they are not made more coherent, because they retain the same relative position with respect to the other groups and still show a sharp decline in reading passage style. If anything, the representation becomes even less coherent because the young adults' scores now intersect the adults' scores. (In fact, even if eliminating Elizabeth had made the representation more coherent, it would still be a fudge of the data. Elizabeth's scores for raising are high, all right, but there are no grounds whatever for considering that her behaviour is thereby "aberrant"; in fact, she represents many girls and young women in North Toronto who are noticeably ahead of their peers in their raising indices.) Similarly, if we were to partition the results further into sex and age rather than just age, the coherence not only would not improve but would actually worsen by creating intersections of the scores for pre-teen boys and adult women, and for young men and older men, and so on; the information necessary to make such a representation is given in Table 6.

style:	WL	RP	IS
MCAM	8	9	5
MCAF	0	0	3
MCYM	11	6	7
MCYF	17	10	21
MCKM	1	0	0
MCKF	2	4	4

Table 6--Raising indices by age and sex, and contextual style.

The failure of any reasonable analytic effort to bring the vowel height reflexes of (aw) into line leads inevitably to the conclusion that vowel height, though clearly involved in the change in progress, remains in a state of flux at this early stage of the change. In other words, there are no new norms with respect to vowel height in the variants of (aw) that one hears in North Toronto, at this time. The fact that all the indices for all the groups are quite low reveals that the vowel is normally mid before a voiceless consonant and low elsewhere, although all social groups and age levels fluctuate somewhat from the idealization expressed in the Canadian Raising rule. However, while it seems clear that there is no new norm with respect to vowel height, other aspects of the analysis of (aw) suggest that it is possible to isolate an emerging norm for it, as will be seen in Figure 7 on page 24.

Turning now to the analysis of fronting, we again plot the indices for each of the age groups in each of the contextual styles, as shown in Figure 4 on page 21. The result is a clear stratification of the three groups, with the adults showing the most conservative behaviour, falling close to the abscissa, the young adults significantly removed from them in all styles, by as much as fifty index points in the most formal style, and the pre-teens still further from the abscissa. The response with respect to contextual styles is also revealing, with only the adults showing a configuration revealing social awareness of the variable, and then only slightly, as fronting increases in the most casual style. The other two groups are, by contrast, consistent in the extent of their fronting in all styles, thus evincing the lack of awareness of variable (aw) that characterizes a linguistic indicator.

The contrast between Figures 3 and 4 is certainly striking, and shows beyond a reasonable doubt that it is fronting, not raising, that is the key to the change in progress with respect to variable (aw) in North Toronto.

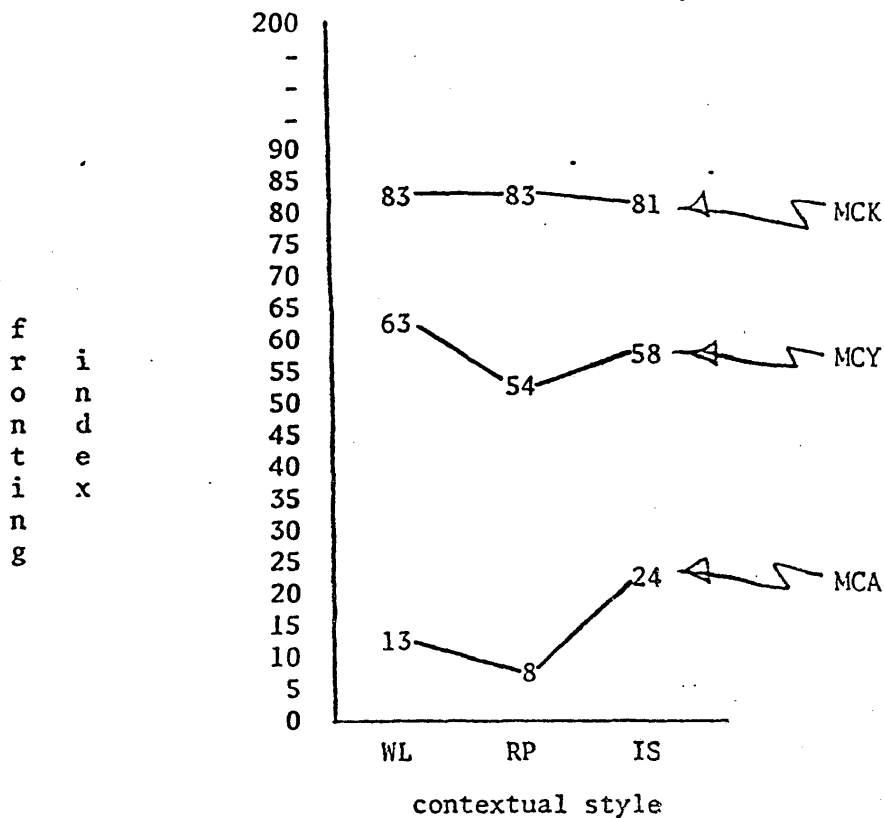


Figure 4--Fronting by age and style

4.2. Females, not males, are leading the change.

The preceding subsection shows that the variable (aw) is presently undergoing change by virtue of the age stratification with respect to fronting. It is possible now to refine the analysis to show that within each age group the females consistently display higher fronting indices than the males, and that the females are therefore the principal agents of the change. This is represented in Figure 5 on page 22, where the fronting indices are laid out graphically for each of the sexes in all of the age groups.

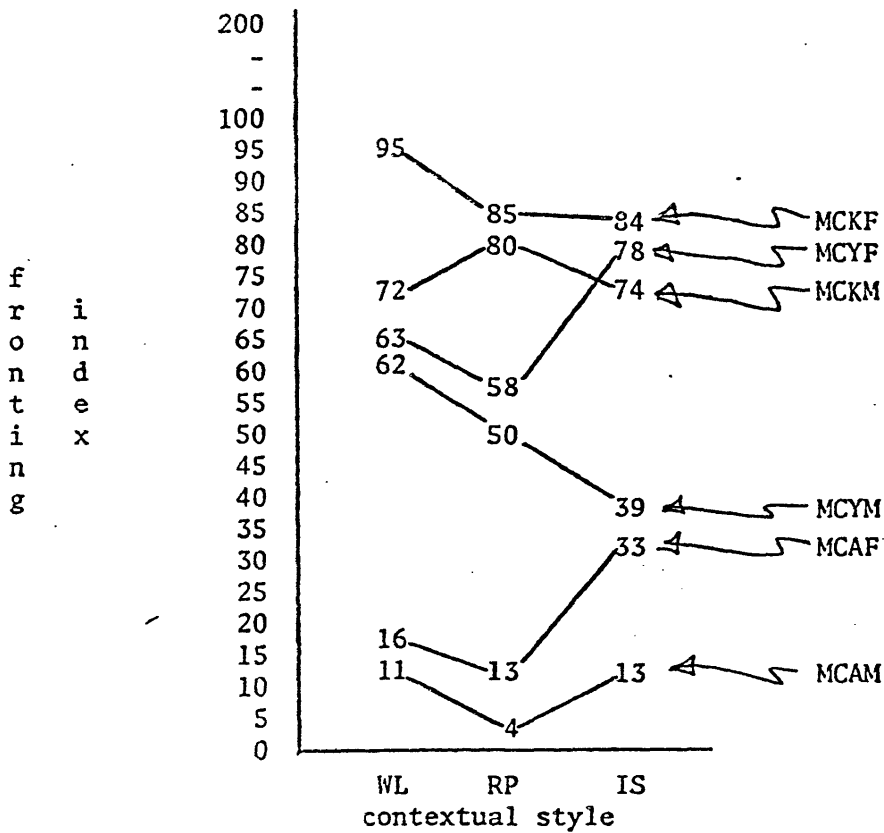


Figure 5--Fronting by age and sex, and style.

Reading Figure 5 from the abscissa upwards shows that the groups are stratified by age, as expected, with the adults most conservative and the pre-teens least conservative, and that within each age group, the females are less conservative than the males. The only deviation from this pattern occurs in the interview style, where the index for pre-teen boys is slightly lower than the index for young women. The difference, shown in Table 7 below, is only four index points, which is insignificant, particularly in light of the fact that the younger groups reveal no systematic response in their fronting norms with respect to contextual style anyway.

Style:	WL	RP	IS	All styles
MCAM	11	4	13	8
MCAF	16	13	33	20
MCYM	62	50	39	50
MCYF	63	58	78	66
MCKM	72	80	74	77
MCKF	95	85	84	88

Table 7--Fronting indices by age and sex, for each contextual style and for all styles.

Actually, Figure 5 may appear to be less conclusive than it really is, because it attempts to correlate the fronting indices with contextual styles, which have been shown earlier to have no apparent significance for the younger groups. The fronting indices can also, obviously, be calculated without regard to the styles in which the tokens occur, giving the new set of indices shown in the right column of Table 7. This set of indices, represented in the bar graph of Figure 6, is absolutely unequivocal, thus underlining the conclusion that females, not males, are leading this linguistic change.

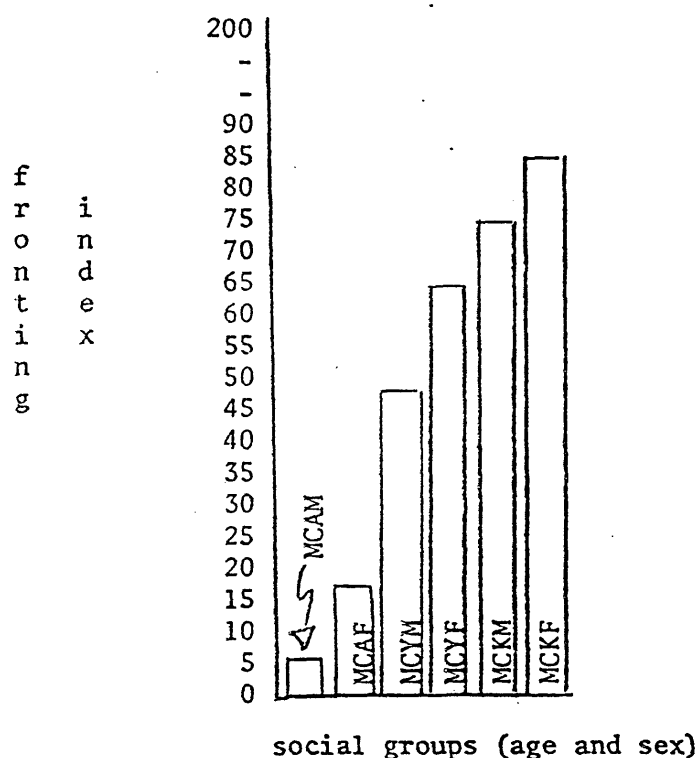


Figure 6--Fronting by age and sex, all styles

Just as the fronting index can be calculated regardless of contextual style, so can the raising index, giving a new set of scores that measures the failure to raise the vowel in voiceless environments in all styles. The indices which are not a function of style can now be represented on the same graph, thus describing graphically the raising and fronting behaviour of the various social groups by locating the point of intersection of the fronting index (along the ordinate) with the raising index (along the abscissa). The resulting graph, based on the indices shown in Table 8 on page 24 (which repeats for convenience the fronting indices for all styles from Table 7) is shown as Figure 7 on page 24.

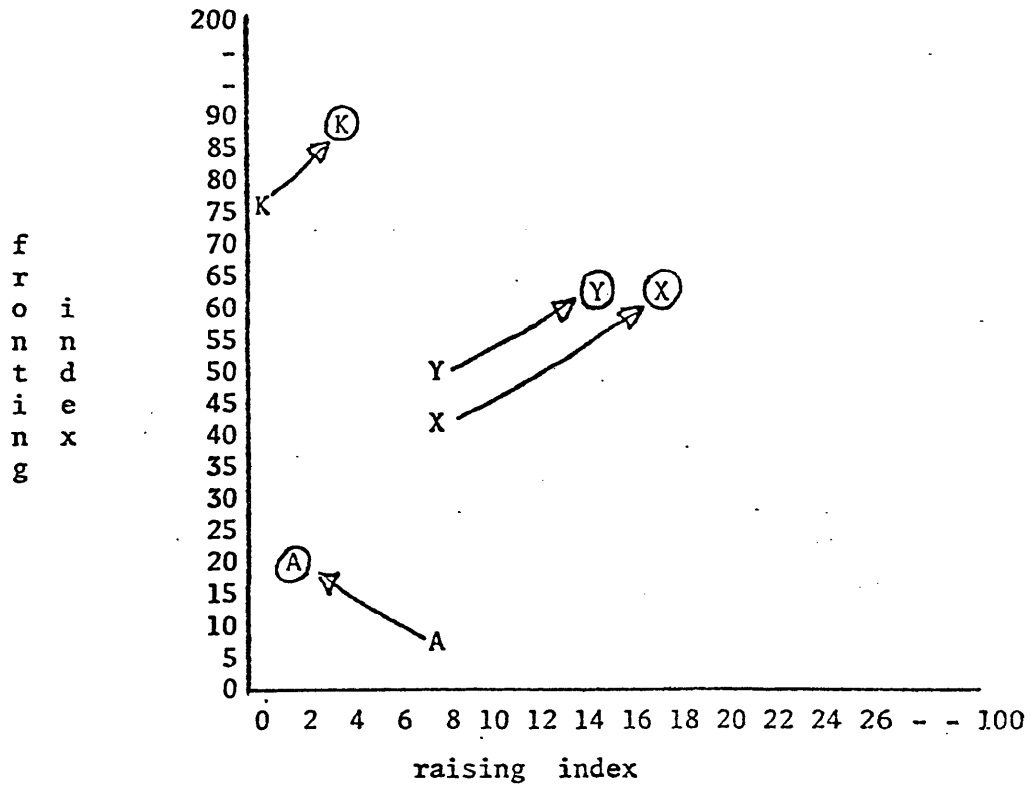


Figure 7--Combined scores for fronting and raising in all styles. A = MCAM; Ⓐ = MCAF; Y = MCYM; Ⓨ = MCYF; K = MCKM; Ⓚ = MCKF; X = WCYM; ⓧ = WCYF.

indices:	Fronting	Raising
MCAM	8	7
MCAF	20	1
MCYM	50	7
MCYF	64	14
MCKM	77	0
MCKF	88	3
WCKM	43	7
WCKF	64	17

Table 8--Fronting and raising indices for all social groups in all styles.

Figure 7 and Table 8 reveal a new and unexpected correlation between the fronting and raising behaviour, namely, the higher the fronting index, the higher the raising index. Although the raising index, as shown earlier, does not in itself

reveal a systematic aspect of the change in progress, when it is combined with the fronting index a new phonetic aspect of the change emerges. The tendency not to raise the onset of the diphthong in front of a voiceless consonant is greater when the vowel is fronted than when it is central. Thus the females in each age group not only use fronted vowels more frequently (as was already established by Figures 5 and 6), but they also fail to raise more frequently. The one exception to this correlation is among the adults, where the women use more fronted vowels but actually also raise more consistently; this is indicated on Figure 7 by the direction of the arrow linking the men to the women, which points in the direction of the ordinate rather than, as for all the other linking arrows, away from it. I think we may fairly discount any significance of this apparent counter-tendency among the adults, because for them neither fronting nor raising is undergoing any very noticeable change, a point that was elaborated in section 3. On the other hand, for the three other groups, for whom the variation indicates a linguistic innovation, the correlation is likely to be significant. Specifically, it suggests what the role of raising, which is too unstable to be revealing in its own right, may eventually become. As fronted vowels become more frequent during the progress of the change in succeeding generations, we can expect that failure to raise the onset before a voiceless consonant will also be more frequent. One obvious result of such a development will be a smaller set of phonetic variants than is currently found in North Toronto, with front-central and front vowel onsets occurring only as low vowels and never as mid vowels.

4.3. 'Elsewhere' environments, not voiceless, are changing more rapidly.

So far, I have characterized the change in terms of what is changing (fronting, not raising), and who is leading the change (females, not males). It is also possible to ask how the change is proceeding, in terms of the possible linguistic conditioning factors. The entire discussion of (aw) has necessarily been couched in terms of two separable phonological environments in which the variants occur, either before voiceless consonants or elsewhere, and the 'elsewhere' environment itself has two easily distinguishable phonological environments, either before a voiced consonant or finally. To discover whether fronting is occurring more frequently in one of these environments than in the others, one need only re-divide the data according to the phonological environments following the diphthong and re-calculate the fronting index for each of the social groups according to environments. The set of fronting indices thus derived is shown in Table 9 on page 26, with the calculation made for a following voiceless consonant (= vls), a following voiced consonant (= vd), a following pause or word boundary (#), and also for the 'elsewhere' environment, which combines the latter two. Figure 8 on page 26 represents the indices in the three distinct environments.

phonetic environment:	vls	vd	#	elsewhere : (vd & #)
MCAm	8	9	10	9
MCAf	9	32	24	30
MCYM	40	59	66	61
MCYF	49	82	73	76
MCKM	63	90	64	82
MCKF	40	126	126	126

Table 9--Fronting indices with respect to phonological environments following (aw).

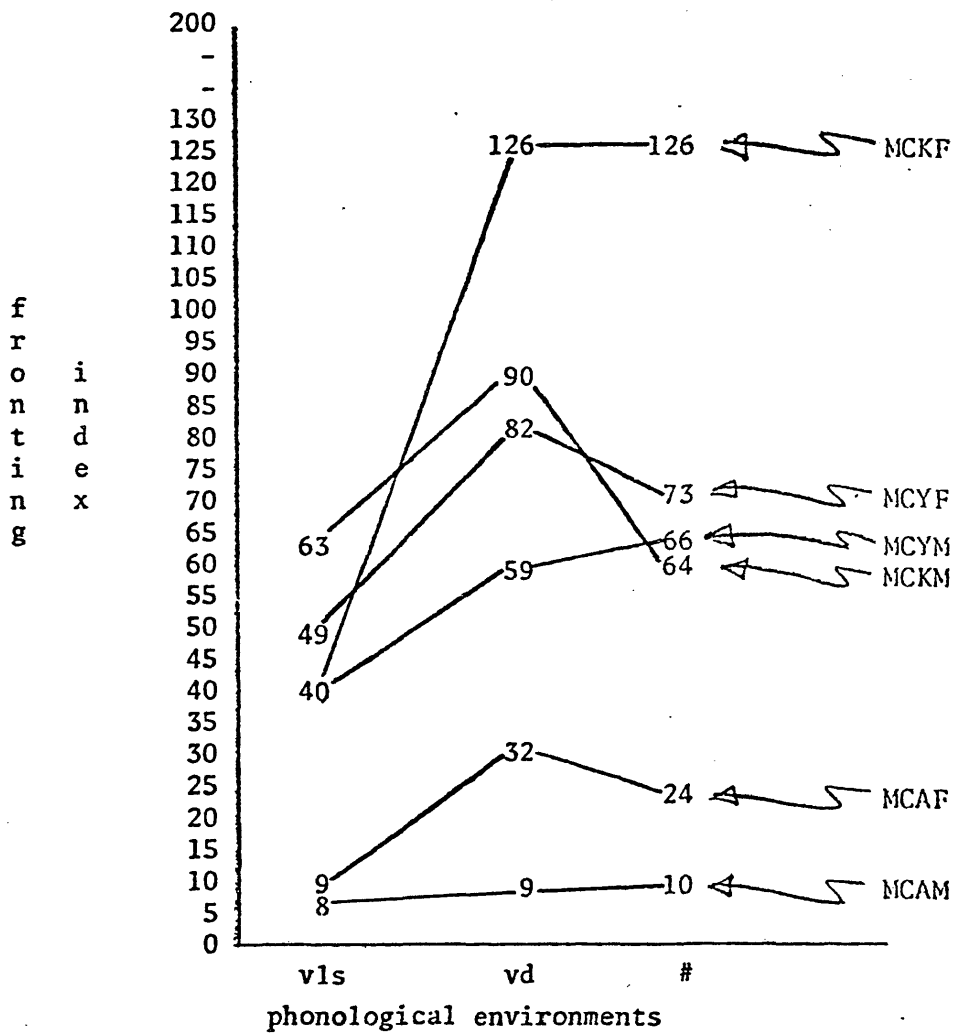


Figure 8--Fronting indices for each social group with respect to the three phonological environments: vls = before voiceless consonants; vd = before voiced consonants; # = word-final.

The picture presented by Figure 8 is not entirely clear, although a couple of observations about it are clear enough. In the first place, the tendency toward fronting is markedly less before a following voiceless consonant than it is before the other two environments. All of the social groups bear out that observation, although it is shown only weakly by the men (MCAM). Secondly, there is a decided tendency to front the onset more frequently before voiced consonants than at word boundaries, which shows up as a recurring pattern in the results for adult women, young women and pre-teen boys. However, this second observation cannot be made with the same confidence as the first one, because the results also show the counter-tendency, with fronting at a word boundary more frequent than before a voiced consonant among adult men, where it is again shown only weakly, and among young men, where it is stronger. The pre-teen girls show an equally strong tendency in both environments. Because of these factors, it would be imprudent to draw any conclusion about the tendency toward fronting in the two subtypes of the 'elsewhere' environment. Similar confusion in the results shown in Figure 8 arises from the stratification of the age and sex groups. The stratification falls perfectly into the pattern we have come to expect for this change in the results for voiced consonants, with the age groups in order from oldest to youngest and the males closer to the abscissa than the females in each age group. The stratification is also close to perfect in the results for voiceless consonants, with only the pre-teen girls out of line. However, the results for word final position are chaotic, showing no reasonable stratification at all. Because of these inconsistencies in the results, it is necessary to withhold any conclusion about the effects of the two elsewhere environments on the change in progress, and to settle instead for the less explicit but safer conclusion that the elsewhere environment in general conditions fronting of the onset more frequently than does the voiceless environment. This generalization can be represented graphically by plotting these two indices together, as in Figure 9 on page 28. The inconsistencies in Figure 8 simply disappear in Figure 9.

In Figure 9, the social stratification for both phonological environments is perfect except for the fronting index for pre-teen girls being somewhat lower than might be expected before voiceless consonants. Apart from that, the consistency of the relationship between the two environments across the entire sample leads to the conclusion that the change is proceeding more rapidly in the elsewhere environments than in the voiceless environments.

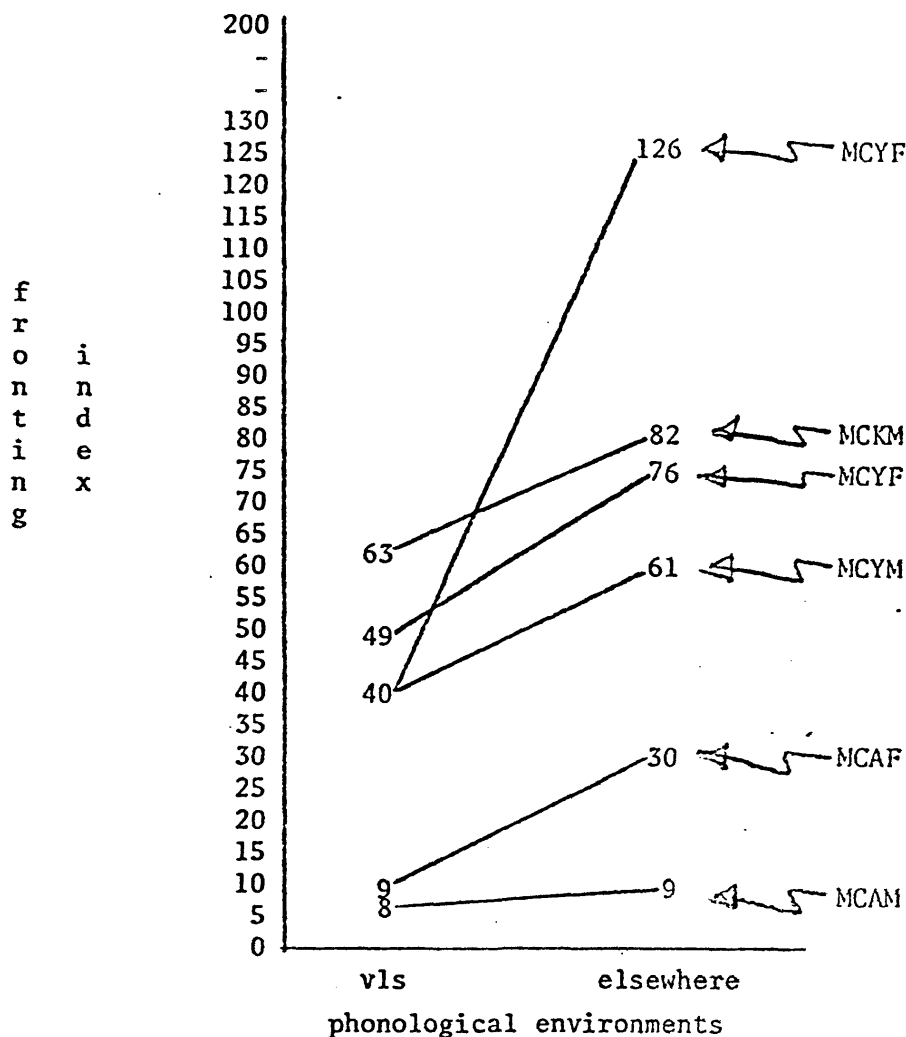


Figure 9--Fronting indices for each social group with respect to two phonological environments: vls = before voiceless consonants; 'elsewhere' = before voiced consonants and word-final.

5. Some prospects

The preceding section specifies what seem to me to be the most secure results to come out of my survey of North Toronto speakers regarding variable (aw). The linguistic change is at a very early stage, judging it not only impressionistically, that is, by my personal awareness of the phonetic differences between older and younger people, but also by certain aspects of the analysis which has been presented above, showing it to be unsystematic with regard to the phonetics of raising and to be insensitive to contextual style. The clearest conclusions, then, at this

early stage are that the change is primarily a change in the frontness of the onset, that the females of the community are more innovative than the males, and that a following voiceless consonant tends to impede the change. There remain, however, some indications of further developments that can be stated, under the assumption that this change in progress is the same in kind as other linguistic changes which have been reported, and also assuming, of course, that its progress is not checked by competing changes (Wang 1969) or other unforeseeable events. Other things being equal, we can expect, in the next generation or so, an increase in the tendency toward fronting comparable at least to that which now separates the twelve and twenty-two year olds. Such an increase will thus establish the onset vowel of the diphthong for the youngest group as normally front-central (index 100). Such an increase might be expected to lead to a greater social awareness of the change throughout the community, perhaps leading to overt comments by older speakers about the speech of the younger speakers and also to differentiated behaviour in different styles of speech. At this point, variable (aw) will no longer be just an indicator in the community but will have become a marker. It is also possible that at some point during these developments the front-gliding diphthong, currently realized consistently as [ʌy] before voiceless consonants and [ay] elsewhere, will also begin to show some phonetic variation and be drawn into the process of change.

Such prospects are, of course, on a completely different confidence level from the conclusions discussed in the preceding sections, which are revealed by the analysis of data rather than by extrapolation from other, comparable linguistic situations to this one. Nevertheless, they represent predictions based on real information rather than on sheer speculation. And they are only available at all because of the insights provided by the linguistic analysis of the data from the survey. Those insights, which are insights into linguistic variation correlated with independent variables such as age and sex, are, perhaps paradoxically, founded upon the insights provided by a very different kind of study, which was based on an assumption of homogeneity rather than heterogeneity. From the study incorporating Chomsky's idealization of the speech community came the essential insights into the linguistic conditioning and the community norms against which the real data, the realization, were measured. Without that, we would have been left with nothing more than an agglomeration of phonetic variants, surprising perhaps in its diversity but of no real interest to linguists or anyone else.

NOTES

*I am grateful to Terry Pratt and Murray Kinloch for inviting me to talk about variable (aw) at the APLA/ALPA meeting in Fredericton, in December 1980. The survey of North Toronto English, which is the source of my data, was supported in part by two grants from the Office of Research Administration, University of Toronto. Over the years, many of my students have discussed Canadian Raising with me and influenced my thinking about it. Some have made direct contributions to my understanding of it by undertaking mini-surveys on various aspects of it: for this, I would like to thank Steve Bahry, Beth Lavender, Anita Poon, Brian Robinson, Susan Wright, and, especially, Anne Ryall.

¹The other overt comment on (aw) was by Mrs. T., who said, "I remember an English chap we know, and he kept talking about the way we said about, and out, and house."

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French Cod-fishing Terminology of the Seventeenth Century

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Introduction

In the eighteenth century, France ceded Canada to England. Thereafter, it was neither French nor English, but rather Jerseymen who structured the cod-fishing industry in the Bay of Chaleur and Gaspé into a double-knit monopoly which continued from the latter half of the eighteenth into the first half of the twentieth century. The Jerseymen of Anglo-norman origin, structured a monopoly which encompassed the fishing industry, as well as the economic life, of the people who worked for the companies.

The organization of the French seventeenth-century-commercial fishing corresponded very little with the Jersey cod-fishing organization. This is the main reason why a number of the terms pertaining to the cod-fishing industry found in Nicolas Denys' book, *Description Géographique et historique des costes de l'Amérique Septentrionale*. Avec *l'Histoire naturelle du Païs*, published in 1672, are obsolete.

The strength of the Jersey companies lay in their social autonomy. A community life, independent of all social contacts with the local population, was organized for the Jersey clerical staff, as well as for the Jersey workers who were jacks-of-all trades. The Jerseymen spoke their native dialect, which resembles French, only among themselves. Either French or

English was used in all business transactions. All commercial records were kept, and office work was done in English. Communication with the head office in Jersey was also in English. The Jersey businessman was in fact trilingual, having a fluent knowledge of the French, English and Jersey languages.

The French population spoke French at home and in shopping at the company store. Evidence of this can be found at the Shippagan archives where there are original seventeenth-century-order notes written in French. There are notes also written in English which shows that the English, as well as the French, were subjected to the same Jersey monopolistic economic system.

The only evidence of what might be considered a borrowing from the Jersey language is the word ch'lin which was often used in the French order notes.

The word is found under a variety of graphic forms.

Research into the order notes showed that the monetary system used in the nineteenth century was British; however, the French people used the French monetary system as well. The English shilling was often written down as chling by the French. The graphic form ch'lin is found in the dictionary of the Jersey language.

I chose Miscou Island to do my research on cod-fishing terminology because it was a commercial fishing station during both the French and Jersey regimes, and because French, English, and Jersey inhabitants have been living on the Island since the eighteenth century. My interviewing the French fishermen permitted me to note how the terms they use differ from those found in Nicolas Denys' book. Also, I was able to detect which of the two languages, English or Jersey, has affected the French seventeenth-century terminology pertaining to cod fishing.

Miscou Island is situated in the Bay of Chaleur in north-eastern New Brunswick. The present-day population is about 1,000. There are 34 French fishermen still living who are in the age group of 65 to 80. They are the ones who have experienced the economic regime established by the Jersey companies. I was able to interview 28 of the men. Before going out to interview, I prepared a questionnaire of 100 terms selected from Nicolas Denys' description of commercial cod fishing in the seventeenth century. I did not use a tape recorder, rather, I gave the term and asked whether the informant recognized it. When he did, he usually repeated it, and told me what it meant. This permitted me to take note both of the meaning, and a phonetic note of the pronunciation used by the informant. After I had finished all the interviews, I found that a number of terms included in the questionnaire were not recognized by any of the informants thus falling into the category of obsolete terms.

The terms found in the tables were selected arbitrarily, and classified into the following categories:

1. Names for cod
2. Parts of cod
3. Fishing gear and bait
4. Cod processing
5. People employed in dressing cod
6. Marketable cod

I then set up a table for each category. The following abbreviations refer to the headings in the tables:

- 17th C - seventeenth-century term
- L C - lexical change representing the term as it is currently pronounced
- So C - sound change taking into account the phonetic change which has taken place since the seventeenth-century-graphic representation
- Se C - semantic change taking into account meaning with specification as to whether the reference is the same as in the seventeenth century
- % I - percent informants referring to the percent of informants currently using the term

T A B L E

The symbols used in the tables are those of alphabet.

TABLE I : NAMES FOR COD

17th C	L C	So C
la molüe	morue	dissimilation [l] → [R]
la molüe verte	la morue varte	dissimilation [l] → [R] [ɛ] → [ɔ]
la merluche	unchanged	unchanged
la molüe de gaffe	morue de gaffe	dissimilation [l] → [R]

TABLE II : PARTS OF COD

le gau	unchanged	unchanged
la gueule de molüe	djueule de morue	dissimilation [l] → [R] [ɛ] → [ɔ]

S

the French international phonetic

Se C	% I
unchanged (cod)	100% morue
unchanged (salted cod)	100% morue varte
changed (hake)	3.5% hake 96.5% term not recognized
unchanged (large cod)	85.7% morue de gaffe 14.3% not recognized
unchanged	100% gau
unchanged (mouth of cod)	100% djueule de morue

TABLE II

17th C	L C	So C
des tripailles	tripes	unchanged (tripes, tripailles)
des tripes	édjibes	

TABLE III : FISHING GEAR AND BAIT

la boîte	l'abouette	assimilation /labwat/ → /'abwɛt/
l'hameçon	le croc	_____
une gaffe	unchanged	unchanged
la pesche à la ligne	la pêche au jigger	unchanged ɛ → [ɛ] ê → [ɛ]

Se C	% I
unchanged (cod entrails)	21.4% tripaille 3.5% édjibes 75.1% tripes
unchanged	100% l'abouette
unchanged (hook)	100% recognize hameçon but use croc
unchanged (hook to bring in large cod)	100% gaffe
unchanged (fishing cod)	100% recognize pêche à la ligne but fish with a jigger

TABLE IV : COD PROCESSING

17th C	L C	So C
habiller la molüe	édjiber la morue	dissimilation [l] → [R]
les vignaux	vigneaux	unchanged
la grave	unchanged	unchanged
mettre la molüe au verd	1) mettre la morue en saumure 2) saler la morue	dissimilation [l] → [R]
mettre la molüe en mouton	1) mettre la morue en javelle 2) en pille 3) en balot	dissimilation [l] → [R]

Se C	% I
unchanged (to disembowel cod)	100% édjiber la morue
unchanged (scaffolding upon which cod is dried)	100% vigneaux
unchanged (work of drying cod)	60.7% la grave 35.8% no answer 3.5% pebbly beach
unchanged (to salt cod)	14.3% en saumure 85.7% saler la morue 0% au verd
unchanged (stacking cod)	71.4% en javelle 7.0% en pille 3.5% en balot 18.1% no answer

TABLE V : PEOPLE EMPLOYED IN DRESSING COD

17th C	L C	So C
un habilleur	trancheu	_____
un picqueur	picqueu	deletion of suffix eur [œR] [ø]
un saleur	saleu	deletion of suffix eur [œR] [ø]
un décolleur	décroleu	inversion /dəkɔlœR/ → /dəkRɔlø/

TABLE VI : MARKETABLE COD

la molüe marchante	la morue marchante	dissimilation [l] → [R]
la molüe de rebut	la morue derbut	1) assimilation /dərəby/ → /d'ərby/ 2) dissimilation [l] → [R]

Se C	% I
unchanged (one who disembowels cod)	100% trancheu 0% habilleur
unchanged (one who slits cod)	100% picqueu 0% picqueur
unchanged (one who salts cod)	100% saleu 0% saleur
unchanged (one who beheads cod)	100% décroleu 0% décoleur
unchanged (top quality cod)	100% la morue marchante
unchanged (inferior quality)	100% la morue derbut

Comments on data presented in the tables:

The data presented in the tables show that the lexical changes which have occurred historically, for the most part, retain a semantic correspondence with the seventeenth-century terms. There are three kinds of lexical changes represented in the data. These can be summarized as follows:

1. Lexical changes which are the result of sound changes, and which retain a semantic correspondence with the seventeenth-century term thus showing that the phonetic change did not affect the present-day meaning.

Example: [l] → [ʀ] molüe → morue

2. Lexical changes which are replacements of seventeenth-century terms, yet retain the same meaning.

Example: mettre la molüe en mouton →
mettre la morue en javelle

It is to be noted that mettre la morue en javelle is a French agricultural expression dating to the thirteenth century. Its meaning is to stack wheat in bundles or faggots.

3. Lexical changes which are the result of graphic changes with the meaning unchanged.

Example: les vignaux → les vigneaux
la pesche → la pêche

4. The data also show that there are terms which have undergone neither sound nor semantic change.

Example: 1) la grave; 2) une gaffe

These terms have remained stable. It is to be noted, that in the seventeenth century, cod was dried on pebbly beaches. The work of drying cod was referred to as la grave.

5. In the data, the present-day term merluche does not have a semantic correspondence with the seventeenth-century term. In the seventeenth century, merluche referred to dry cod whereas today, it is a synonym for barbue in French. The English term is hake or codling.

6. The terms which are English borrowings are:
1) édjiber; 2) jigger

Edjiber comes from the English verb to gib or disembowel. The word was borrowed by the French and underwent a structural change which is as follows:

- 1) addition of the prefix - é - sound [e] ; meaning, out
- 2) sound change [ɛ] → [dʒ]
- 3) addition of suffix - er - sound [e] ; indicating a 1st conj. Fr. verb ending

This change made possible the use of édjibes as a noun meaning entrails.

7. Jigger is the English term for a fishing lure. In the seventeenth century, fishermen fished cod with lines and hooks. After the seventeenth century, the jigger rather than a hook, was used to fish cod. The fishermen have retained the English pronunciation of the term: jigger.

Conclusion

The research on cod-fishing terminology which I did on Miscou Island, indicates that the French fishermen used their native language at work. The terms pertaining to their trade, and inherited from the seventeenth century were preserved for the most part by the fishermen on the north-east coast of New Brunswick as standard French. Terms with the same semantic reference are to be found in Boats and Fishing Gear Terminology Bulletin published by the Canadian Secretary of State.

That which I have presented in this paper is sample data which indicates that the borrowings found in the

fishing terminology come from the English, and not from the Jersey language.

I would like to take this opportunity in thanking the people on Miscou Island who received me kindly, and who did their best in cooperating with me during the interviews. My special thanks also to Marie Esther Robichaud for her invaluable help to me during my research in the archives. My thanks also to Sr. Rose Mary Gauthier, the Centre's librarian, to our secretary Louise who did my typing and to Diane Saucier who read and criticized my first draft.

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Finite Sentence Languages Are Finite

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"La langue et l'esprit ont leurs bornes.
La vérité est inépuisable."

Luc de Clapiers, marquis de
Vauvenargues (1715-1747)

Chomsky 1975:5 provides the following definition for language as a formal entity:

"A language L is understood to be a set (in general infinite) of finite strings of symbols drawn from a finite 'alphabet'. Each such string is a sentence of L ."¹

In algebraic terms, given a finite set V , called the vocabulary, consisting of n elements called words, we may define a language L over V as any subset of the free monoid V^* of finite strings of elements concatenated from the base set V .

We propose to demonstrate that there is a contradiction between the assumption that a language contains an infinite number of sentences and the assumption that each sentence of such a language is finite. If this is so, then the following two statements must also be true:

- (1) An infinite language must contain at least one infinite sentence.
- (2) A language consisting solely of finite sentences is finite.

Acceptance of the first of these statements as the basis for a model of natural languages requires extension of the definition of concatenation and the imposition of certain restrictions

on the form of infinite sentences. Acceptance of the second has radical implications for some traditional justifications for using recursive devices in formal grammars.

The claim that languages as natural entities or formal constructs are infinite has often been taken as practically self-evident.² In fact, it is impossible to make the claim through simple observation of the languages in their entirety; rather it must be based upon extrapolation of certain of their local properties. Specifically, a language is claimed to be infinite whenever it is possible, given any arbitrary finite collection C of sentences in L, no matter how large, to construct a new sentence which is in L but not in C. Other criteria might be employed, using arguments already established in mathematics (e.g. a language is infinite if it may be placed in one-to-one correspondence with one of its proper subsets), but previous linguistic consideration of the possible infinite nature of language has used only this line of reasoning. The means of generating the sentence required by this criterion may vary (e.g. embedding, concatenation), but they are not pertinent to our purpose here. What is relevant is this criterion's assumption that the impossibility of establishing a specific finite upper bound on the number of sentences in L implies the existence of an infinite number of them.³ This same principle may be used to establish the existence of an infinitely long sentence in L.

There can be no longest finite sentence in an infinite language L. For suppose that S is such a sentence. Then S, being finite, may be assigned a finite positive integer p, called the length of S, representing the total number of occurrences of elements of V in S. The total number of distinct sentences of length p possible in L may be calculated to be

$$(3) \quad n^p$$

where n is the number of elements in V. Similar calculations may be performed for every sentence length less than p, leading to the formulation of the total number of possible sentences in L as

$$(4) \quad \sum_{i=0}^p n^i$$

Since both n and p are finite, this quantity is also finite. But that contradicts our initial assumption that the language L is infinite.

The existence of an infinitely long sentence in L requires reformulation of the notion of concatenation, the process of linking elements of L into a series, since the customary definition is dependent on the assumption that both of the elements being linked are of finite length: given a sentence A and a sentence B , in that order, we can associate with the ordered pair (A, B) the sentence AB which is obtained by writing the words of A followed by those of B .⁴ Concatenation in this traditional sense is defined everywhere in L only if the first element of the ordered pair (A, B) is finitely bounded on the right and the second element is finitely bounded on the left, for if A continues forever to the right it will never be possible to add the words of B to its end, while if B continues to the left forever we will never be able to locate its beginning to add to A .

There are three separate types of possible infinite sentences: unbounded infinite sentences, i.e. those that continue forever in both directions; left-bounded infinite sentences, i.e. those that begin at some finite point and extend rightward forever; and right-bounded infinite sentences, i.e. those that end at some finite point but extend leftward forever. Since sentences in natural languages all have a specific beginning point with respect to time, it seems reasonable to exclude unbounded and right-bounded infinite sentences from consideration in our mathematical model. This will simplify somewhat the new formulation of concatenation.

It is possible to extend the customary definition of concatenation in a natural way to the case of left-bounded infinite sentences:

- (5) If A is a left-bounded infinite sentence, then $AB = A$ for any B in L .
- (6) If B is a left-bounded infinite sentence, then AB is defined as the listing of the words of A followed by those of B if A is finite; if A is itself left-bounded infinite, then (5) applies.

This formulation captures the intuition that if a sentence extends to the right forever, it is impossible to add any additional elements to its end, since it does not end. It is easy to see that the operation as extended is defined everywhere in L and is associative.

This proposed modification of the definition of a formal language allows us to maintain the claim that languages contain an infinite number of sentences on an internally-consistent basis. It provides no evidence for the claim itself. Indeed, if we turn from the mathematical model to the object being modelled, meanwhile contemplating the fact that the number of atoms in the known universe is smaller than a googol, and keeping in mind the ephemeral nature of natural languages and Man himself, we may find it advisable to change our wording from "language is infinite" to "language is inconveniently large". While this would eliminate a purely theoretical argument for preferring a recursive description of language over an "item-and-arrangement" model, all the practical advantages of recursion would remain.

NOTES

¹Similar formulations are to be found in Gross and Lentin 1970:1-12 and Salomaa 1973:3.

²See, for example, Chomsky 1966:33-40, polemicizing with Dixon 1963.

³This assumption is actually not so obvious. Cantor 1911 contains a classic formulation of the difficulties involved: "Finally I have still to explain to you in what sense I conceive the minimum of the transfinite as limit of the increasing infinite. For this purpose we must consider that the concept of 'limit' in the domain of finite numbers has two essential characteristics. For example, the number 1 is the limit of the numbers $z_v = 1 - 1/v$, where v is a variable, finite, whole number, which increases above all finite limits. In the first place the difference $1 - z_v$ is a magnitude which becomes infinitely small; in the second place 1 is the least of all numbers which are greater than all magnitudes z_v . Each of these two properties characterizes the finite number 1 as limit of the variable magnitude z_v . Now if we wish to extend the concept of limit to transfinite limits as well, the second of the above characteristics is used; the first must here be allowed to drop

because it has meaning only for finite limits. Accordingly I call ω the limit of the increasing, finite, whole numbers v , because ω is the least of all numbers which are greater than all the finite numbers. But $\omega - v$ is always equal to ω , and therefore we cannot say that the increasing numbers v come as near as we wish to ω ; indeed any number v however great is quite as far off from ω as the least finite number. Here we see especially clearly the very important fact that my least transfinite ordinal number and consequently all greater ordinal numbers, lie quite outside the endless series 1, 2, 3, and so on. Thus ω is not a maximum of the finite numbers, for there is no such thing." (p. 78).

⁴This definition is parallel to that given in Gross and Lentin 1970:3.

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Is There Such a Thing as Set Meaning, and Do We Need It?
Collocational and Selectional Restrictions Revisited

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IDIOMATIC MEANING. The working hypothesis here is that compounding and idiom-formation have something in common and that compounds may be envisaged as a type of idioms.

For this purpose, idiomatic meaning cannot be considered as an exception, but rather as an extreme on a bipolar continuum, while minimum free forms would be at the opposite, displaying maximum combinability. Full idioms, although still combinable, exhibit little combinatory potential; they belong to a higher combinatorial system compared to morphemes or words and can be described as trans-semiotic units, as suggested in an earlier paper (Choul, 1980).

Consequently, free forms would carry full feature meaning, while idioms, although made up of free forms, would show a lack of meaningful units contributing effectively to the meaning of the sequence, as illustrated in (1):

	free forms		idioms
(1)	+ combinability	←—————→	- combinability
	+ feature meaning		- feature meaning

This lack of meaningfulness corresponds to the now traditional definition of idioms as given in the Longman (1978): 'a fixed group of words with a special meaning that cannot be guessed from the combination of the actual words used.'

LOSS OF FEATURES. Idiomatic meaning can be seen as a loss of features in a given sequence. This loss is manifest if we try to derive the meaning of the complex expression from the meaning of its parts (Weinreich, 1969), or to amalgamate these various meanings (Chafe, 1968), or to interpret the structure of the whole as a compositional function of the formatives (Fraser, 1970).

The non-compositional nature of idioms makes it necessary to use a metalinguistic device, paraphrase, to determine their meanings. This would mean that the components of an idiom, while part of it, should have

the value or sense of their paraphrastic counterparts. This semantic exchange similar to connotation can only take place if the features of the actual formatives are deleted.

COMPRESSION. The loss in features (the *bull* in *shoot the bull* will not be assigned /male/, /animal/, etc., nor will *steam* in *let off steam* receive a reading like /water in the state of a gas/) seems to be correlated to the behaviour of an idiom as a word. That is to say the size of an idiom does not entail the growth of its reading, and that there seems to be a sort of implicit rule governing idioms and semantic units: the number of features present at any one time in the reading of a unit is limited. Any syntagmatic build-up results in successive deletions. (2) and (3) will respectively have readings (4) and (5):

- (2) to have a soft spot for someone
- (3) to have a lot on the ball
- (4) /to be fond of someone/
- (5) /being capable/

If then maximum-length idioms are also those exhibiting the most feature or semantic loss, the scale in (1) can be interpreted as a semantic loss or compression scale:

- | | | | |
|-----|---------------|---------|---------------|
| (6) | - loss | ←—————→ | + loss |
| | - compression | | + compression |

Items such as collocations and semi-idioms or phrases would possibly fit on the scale between free forms and idioms.

COLLOCATION AS LOSS OR COMPRESSION. Collocations are usually excluded from a compiling of idioms. Firth (1964) saw collocation as a keeping company between words, a tendency to cooccur, and Culioli (1968) tried to identify it as a fundamental formal relation between lexical items, similar to what Pottier (1974) called an association relation exerting a phraseological constraint on occurrences.

Collocations (plural) are then the result of collocation as a process. According to Longman's, they are not idioms, but 'words often used together to form a natural-sounding combination'. The progression seems to be collocation, phrase and idiom, and is one of rela-

tive fixedness. Collocations are just frequent, phrases have become fixed and idioms have a special meaning, somehow attributable to frequency and fixedness.

Specialization in meaning will be found with maximum compression, but is obviously a matter of gradation, just as fixedness. That is to say collocations will also exhibit some losses, as in (7):

(7) Here and there → /in various places/

PHRASES (SEMI-IDIOMS). The use of a scale-type continuum is necessary in order to avoid indiscriminate exclusions, such as (7) rejected by Fraser (1970) as a mere collocation displaying a literal reading. In a similar manner, Longman's will label *let off steam* as a phrase, which is in contradiction with the alleged special meaning. Normally semi-idioms are sequences where part of the meaning can be guessed from some of the components, as in (8):

(8) Take the train

Train here still refers to a means of transportation, just as in the French, but idiomatic meaning is nevertheless felt. When I was a kid back in Belgium, the current joke was to say 'Don't forget to give it back'. The same observation is valid for (9), probably because of a limited range of collocates:

(9) Emprunter 'borrow' + voie 'way', 'road'

The point here is that, whether a phrase or an idiom, parts of it are opacified, if not the whole, as in (10):

(10) To get up steam → /to begin to move with power and speed/

COMPOUNDS. Marchand (1960) attributes compounding to a 'natural human tendency to see a thing identical with another already existing and at the same time different from it', but this excludes exocentric (class changing) compounds such as *pickpocket* and *blackout*, and synthetic ones such as *householder*.

The most important factor, according to him, is the underlying concept, as /purpose/ in *freight train*, /destination/ in *frying pan*, /originator/ in *rainwater*, and /resemblance/ in *kettledrum*. The link with phrases or

phrasal verbs is obvious in the series given by Adams (1973): *look on* = *looker on*; *pass by* = *passer by*, etc. But more obvious is the fact that compounds are also collocations of single units, and an unknown compound will not receive a 'compound' reading. As Marchand (1960) noted: 'any syntactic group may have a meaning that is not the mere additive result of the constituents.' There is no formal indication that the relation between *black* and *market* is different from the one between *black* and *pencil*, although there may be a contextual one.

The reading of a compound, whether or not it exhibits a new concept through identity plus differentiation (Marchand, 1960), is not an amalgamation of the component meanings, as shown in (11):

(11) Steamboat → */water in the state of a gas
 produced by boiling/
 + → /ship/

Steamboat can be compared to *gravy boat* or *steam iron*, and *steam engine* to *fire engine*. There is something common to items in (12) and to items in (13), but not to those in both (12) and (13):

(12) fire hydrant, fire escape, fire engine
(13) firelight, fireguard, fireplace

Semicompression seems to be more complete in (12) since *fire* in that case has to be read as /destruction by fire/. This would mean that not all compounds can be specific to a given position on the continuum, any more than phrases, since feature loss will not be as extensive from one to another.

COMPOSITION OR SYNTAGMATION. Cooccurrence of items, we are tempted to suggest, is never a composition of meanings. This would lead us to discard the idea Marchand (1960) has put forward to distinguish compounds from syntagmas: the latter being combinations of full signs.

Benveniste (1966) proposed a new concept that would account for all phenomena taking place on the horizontal axis of language, and which opposes the amalgamation principle. Contradictory items will for instance combine formally, yielding a new relation. *Aller* 'to go' and *venir* 'to come' are stabilized into two quite different realizations: *va-et-vient* 'traffic' or 'comings

and goings' and *il va venir* 'he's going to come'. This is to suggest that there is no such thing as a combination of full signs. Through syntagmation, signs will retain only a small fraction of their value as full signs.

Sentence meaning does not combine signs but already processed, syntagmated units, which in turn are bound to lose some of their value through sentencing. In other words, expansion on the syntagmatic axis has no direct connection with meaningfulness, or with systemic (paradigmatic) values: rather it can be understood as a succession of deletions of which compounds, phrases and idioms are products.

DELETION (POLYSEMY). Feature deletion (semic compression) is also a possible explanation of polysemy. A polysemous item is typically a full sign not submitted to syntagmatic constraints, and polysemy, as suggested by Benveniste (1966) is the institutionalized summation of the various contextual values and relations gathered by an item in collocations.

Thus the insertion of a lexical unit in a given assembly, whether a compound or a syntagma, will always result in the deletion of features. (14) discards all possible connection with /destruction by fire/, and (15) any link with *fire box* or *fire break*.

(14) He lit a fire to cook his supper.

(15) They used the fire escape to break in.

Polysemy is a paradigmatic phenomenon indicative of the insertion potential of a given form. On the continuum, it will be found on the side of maximum combinability, and represents one aspect of the study of meaning in language, as a system, while on the opposite we have the second theoretical choice: meaning in actual combinations, as illustrated by (16):

(16) paradigm ←————→ syntagma
polysemy homonymy

SELECTION (HOMONYMY). Compression, loss or deletion could be misleading in some way, and syntagmation could also and more traditionally be seen as a selection in the semic or dictionary description of an item. Semic description is meant to cover all potential readings for items in their collocate family.

Retaining a relevant feature is indeed selecting a sense, and typical of cooccurrences in contexts. This contextual sense selecting is but the mirror image of deletion: items are not considered as polysemous but as homonyms. Instead of having one *fire* collocating with *box*, *break* or *power*, we may have *fire*₁, *fire*₂, *fire*₃. Similarly, *power* collocating with *boat*, *wind*, *brakes*, *station* or *fire* can be broken down into *power*₁, *power*₂, *power*₃, *power*₄ and *power*₅.

Compounds thus exhibit the same characteristic Weinreich (1969) noted for idioms, co-selection. *Power* and *fire* in *firepower* operate a mutual selection in the available paradigmatic series, retaining respectively *fire*₃ and *power*₅.

This in turn can be interpreted as a condition for assigning a reading: *fire*₃ sense is as in the assembly *firepower* /gunfire/. A given syntagmatic assembly, or semotaxis (Choul, 1979, 1980), acts as a rule, which could read as (17):

(17) Item I has value V in semotaxis S.

This type of rule can be extended to determine the proper reading for *firebrand* as /a piece of wood on fire/ or /someone causing anger or excitement/, and read as (18), that is, if *firebrand* shares reference with a person, it cannot be interpreted as /a flaming piece of wood/:

(18) Item I has value V in semotaxis S if feature F is raised

SELECTIVE DELETION. Deletion then is selection, and vice-versa. Although features are compressed, not everything is lost. The exclusion is meant to block off semantic overloading. While selective deletion could be more plainly seen as shift in meaning, this would tend to support the view that words have a meaning. Although this may be true for some purposes, meaning would be better understood as a form-investment. Not all forms contribute to meaning to the same extent, as mapping with paraphrase shows, in compounds as well as in idioms. In *housebreaking* by a housebreaker, less features are deleted than in *housebroken*(pets). Just as between *give the sack* /fire someone/ and *hit the sack* /go to bed/, where *hit* retains very little of its potential meaning; in fact, only /contact/ will remain.

IDIOMS AGAIN. Selective deletion, although comparable to lexicalization, is supposed to take place in every syntagmation. Compounds and phrases are simply more typical of what is happening. The more recent semantic theories have included this observation, already noted by Bréal (1897), under the name of selectional restrictions or selection relations (Katz, 1972, among others), but the emphasis is on restrictions, to prevent meaningless unions. The selection restriction states the common semantic element, not belonging to the definition.

Since idioms have been my starting point, a few examples will show that most restrictions are violated. *Drink* normally requires the feature /liquid/ in the object, but what happens in *drink someone under the table*? The *breeze* in *shoot the breeze* cannot be killed or wounded, and, to go back to *steam*, someone could hardly have his own, and be under it, as in *under one's own steam*. Violations will also affect the knowledge of the world, as in *pay through the nose*, *learn by heart*. Coselection is obvious here, and it may be necessary to use an extra rule, as stated in (19), to cover *shoot the breeze*, as well, and some compounds would follow this pattern, although with no regularity:

(19) Item I has value V in semotaxis S if W condition is not satisfied.

LIMITED SELECTIONS. Some compounds will exhibit mutual selection (*firebug*, *firepower*), while in others selective deletion could be one-way. In (20), *pepper* is stable, and in (21), we are dealing with the same steam:

(20) pepper corn, pepper mill, ground pepper

(21) steamboat, steam shovel, steam engine

This last observation belongs to the same order as the particle noted by Marchand (1960). There can be such a thing as class meaning, as with *up* in *drink up*, *eat up*, *beat up*, etc. Class meaning will be on the paradigmatic (systemic) side of the continuum, with set meaning as its mirror image. Set meaning will refer to the change in meaning that is felt in compounds, phrases and idioms, as a result of syntagmation. Set is not a synonym of fixed, unless one wants to see a fixed phrase in *two orders of French fries*, but is linked to semotaxis. Thus *Doric _____* and _____ *of* are semotaxis for *order*.

In other words, set meaning is relevant whenever the assignment of a given sense is context dependent (and in syntagmation there are apparently no context-free words): a synonym for set meaning would be conditional meaning since a set rule states at least one feature to be present in the environment of the item.

TRANSFER. This condition feature is a collocate and can be part of the semic description of the word. It is not a restriction, but an instruction to carry out a selective deletion. As Pottier (1969, 1974) suggested, the limits to combination of lexical items are a matter of imagination, and a semantic theory should not be encumbered by considerations such as logic, likelihood or truth.

Collocation has to be seen as a presyntagmation, on the basis of an existing relation. Items collocate by virtue of contiguity, that is, they share some properties. Again, this is very similar to another concept used by Chomsky (1965), Katz (1972) and others: redundancy. Redundancy, for my purpose, is typically feature-sharing, as used by Jackendoff (1972), and can be described as the presence of features in the semic description of one item belonging also to the semic description of another. To a certain extent, redundancy is a correlate of interdefinition. /Bark/ will appear in the description of *tree*, and vice-versa, and they will both share /trunk/.

Syntagmation will operate on these shared features if assembled items are collocates. Whenever this condition is not fulfilled, common features will have to be established through feature transfer.

Weinreich (1966) and Leech (1976) have included semantic transfer in their models. In the syntagmatic perspective, transfer is optional: it is performed only in the occurrence of non-collocables. Collocates are items which were assigned features common to other items through an earlier transfer. For example, there is no need to perform a transfer in the case of *pepper mill*, any more than in *stage debut*, although the second semotaxis is not necessarily a compound.

Transfer is a necessary part of the syntagmation process, since for all utterances there is an implicit rule of coherence. Transfer is an operation which en-

asures coherence through redundancy. Cooccurring items are correlated on common grounds. A *sidewalk sale* will not be transitive, any more than a *fire sale*. In the latter, a /time/ relation will be assigned, while in the former a /locative/ property will be transferred. Transfer accounts for the underlying concept pointed out by Marchand (1960) and used by Adams (1973) and Dillon (1977).

PARAPHRASE. Although relations should be less numerous than features, it is difficult to get along with just the four listed by Moody (1973): A is contained in B, B is contained in A, A is the source of B, A is the destination of B. Adams (1973) and Dillon (1977), using a more extensive set of categories, related them to paraphrase, or at least a basis for paraphrasing: /B made from A/ for *peanut butter*, /B functions by means of A/ for *gas stove*. This relational or structural paraphrase is obviously a step towards the assignment of a satisfactory reading. But those relations only connect the items, by transferring properties which will be the support for the selective deletion to operate on and specify the meaning. Transfer acts as preselection.

The actual paraphrase takes place once selection retains the relevant features. Although *flour mill* and *coffee mill* may be correlated in a similar way, through /grinding or crushing/, selection differs, as shown in (22) and (23), (24) and (25):

- (22) mill₁ → mill₂ /device/, if coffee _____
 (23) mill₁ → mill₁ /place/, if flour _____
 (24) flour₁ → flour₁ /substance obtained from wheat/,
 if _____ mill₁
 (25) coffee₁ → coffee₂ /beans/, if _____ mill₂

These features are then reassembled (rewritten) in a substitutive form and constitute, with the relation, the 'meaning' of the semotaxis, specifying the sense of the components. Paraphrase acts as a redistribution of redundancy, and this accounts for its characteristic: it is generally an expansion of the initial assembly.

SET MEANING (SEMOTACTIC MEANING). Listing practice in dictionaries is irregular not only for phrases (*cold feet* as a main entry for instance), but also for compounds: *pepper mill* is a main entry, but not *coffee mill*, *flour mill*, *paper mill* or *steel mill*.

Semotaxis, however listed in dictionaries, may be considered to have a base, similar to the root of a word, which would be the determinatum according to Marchand (1960). Thus *coffee, flour, paper, pepper* and *steel* would be filling a slot in a *mill*-based set, but a semotactic module (Choul, 1980) can be established using any component of the compound, as in (26):

(26)	green } red } banana } salt and }	pepper {	tree mill corn steak	carbon letter writing toilet	paper {	mill clip cutter towel
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A semotactic module is a sense-discriminating device which makes it possible to assimilate compounds, phrases and idioms to variations in a syntagmatic structure and to relate the changes in interpretation (different readings) to changes in syntagmatic relations, and finally to establish rules to obtain the readings.

SET MEANING, IDIOMATIC MEANING AND PLAIN MEANING. No mention has been made up to now of the much-publicized ambiguity. Two gunmen can have trouble shooting when there are too many people, while trouble shooting may not be their trade. A farm that looks funny is not basically a funny farm 'asylum' and a lady-killer will not use a gun.

A syntagmatic approach to meaning rejects both transparent meaning and its corollary, ambiguity. Discourse is not the mere combination of signs, and sense a fixed value of those signs, which composed yield meaning. Tackling the problem from the idiomatic end makes it possible to see meaning as a mapping of properties, resulting from operations that can be expressed as rules.

RULES. In the present framework, three distinct rules apply within the set rule and its variants, (17), (18), and (19) above; these operational sub-rules are the transfer rule, establishing redundancy as a shared property, the selection rule, retaining the relevant sense for the semotactic elements, and the paraphrase rule, rewriting relation and senses into a reading. The sub-rules, as applicable to N + N compounds, can be formalized and sequenced and will read as (27), (28) and (29) (R = Redundancy, S = Sense, P = Paraphrase):

- (27) $A+B \rightarrow [R] \therefore \left[\begin{array}{l} A \rightarrow [S] / \underline{B} \\ B \rightarrow [S] / \underline{A} \end{array} \right] \therefore A+B \rightarrow [P]$
- (28) $A+B \rightarrow [R]/F\uparrow \therefore \left[\begin{array}{l} A \rightarrow [S] / \underline{B} \\ B \rightarrow [S] / \underline{A} \end{array} \right] \therefore A+B \rightarrow [P]$
- (29) $A+B \rightarrow [R]/\bar{W}\uparrow \therefore \left[\begin{array}{l} A \rightarrow [S] / \underline{B} \\ B \rightarrow [S] / \underline{A} \end{array} \right] \therefore A+B \rightarrow [P]$

For the interpretation of *salad days*, (28) or (20) may be used, whether the reference to a person is considered as a case of feature raising /possessive/, for instance, or a real-world referent. The sequence of operations would read as (30), if (29) is applied:

- (30) $\text{Salad days} \rightarrow \left[\begin{array}{l} A \text{ is green} \\ B \text{ is green} \end{array} \right] / \text{no salad in reference}$
 $\therefore \text{salad} \rightarrow [\text{innocent and inexperienced}] / \underline{\quad} \text{days}$
 $\therefore \text{days} \rightarrow [\text{time of youth}] / \text{salad} \underline{\quad}$
 $\therefore \text{salad days} \rightarrow \left[\begin{array}{l} \text{time of youth when innocent} \\ \text{and inexperienced} \end{array} \right]$

Conflicting occurrences such as *wind instruments* in (31) may be solved in the same fashion as figurative meaning; the feature to be raised in applying (28) would be /sound/, and the W condition to be satisfied /music/, if (29) were applied.

- (31) The Beaufort scale may be used to estimate the wind where there are no wind instruments.

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Sex as a Sociolinguistic Variable

The Significance of Sex in Attitudinal Stereotypes¹

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Much recent research (e.g. Labov 1972, Trudgill 1975) has pointed to the importance of sex as a sociolinguistic variable. It has been shown that females tend to use more prestige standard forms and fewer stigmatized forms than do males, and, in addition, that women tend towards more hypercorrect linguistic behaviour. Women, it would seem, reveal themselves by their linguistic performance to place more importance than do men on the social value of "standard" and "correct" speech.

While most studies of sex-based speech differences have focused on actual male and female linguistic output, the suggestion has also been made (e.g. Wolfram and Fasold 1974:93-4) that females possess significantly different attitudes than do males to standard and non-standard dialects, i.e., to dialects that reflect the prestige norm to varying degrees. The idea that there exist significant sex-based dialect attitudinal disparities does not seem, however, to have undergone much if any empirical investigation. The study described in this present article constitutes an attempt to assess a number of conclusions derived from the above suggestion, among them the idea that females can be expected to display higher evaluations of prestige or status dialects than do males, yet lower evaluations of non-standard dialects (or dialects which, to use Trudgill's term, serve as "covert" prestige models for males). In other words, this investigation constitutes an attempt to determine whether sex-based differences in personal linguistic performance can be expected to correlate with male vs. female attitudinal differences to other speakers, speakers representing different points in the status hierarchy.

This article reports on an investigation conducted in St. John's, Newfoundland, in the framework of an attitudinal survey of three standard English dialects (1. British Received Pronunciation, henceforth BRP; 2. Standard Mainland Canadian or MC; 3. Upper Class St. John's Anglo-Irish or SJU), and two local non-standard forms (4. Lower Class St. John's Anglo-

Irish or SJL; 5. an Outport Irish Dialect from a small community some thirty miles from St. John's, or OUT). The methodology employed in the major part of the study may be termed "verbal guise", an adaptation of the well-known matched-guise approach (cf. Lambert, Hodgson, Gardner & Fillenbaum 1960). St. John's subjects, that is, listened to thirty-second taped segments of the five dialects under study, and evaluated speakers by means of seven-point bipolar semantic differential scales. According to Lambert et al., such an investigative technique may be expected to reveal those dialect stereotypes that exist in a speech community. In the St. John's study, subjects were asked to rate taped samples on thirteen such scales--representing the traditional Osgoodian factors of evaluation, potency and activity--as well as on three pejorative scales and three scales of occupational suitability. Most important in the light of the present study are the eight scales chosen from the evaluation dimension: these in turn may be broken down into three scales which measure the "status" or "prestige" attributed speakers of each dialect type, and five "solidarity" scales which measure desirable personality traits, or the type of characteristics one might look for in a friend:

Status scales: CONFIDENT, HIGH-PAYING JOB,
INTELLIGENT

Solidarity scales: HONEST, FRIENDLY, KIND,
LIKEABLE, HARDWORKING

As suggested above, if Sex is to be viewed as a significant variable in the formation of dialect stereotypes, the following results should emerge:

- 1) The ratings of female subjects on the three status scales should be significantly higher than the ratings of males when it comes to the three standard dialects (BRP, MC, SJU), or those dialects which to varying degrees serve as "overt" prestige models.
- 2) The ratings of male subjects on the five solidarity scales should be significantly higher than the ratings of females when it comes to the two non-standard dialect types, those which may be expected to hold a "covert" prestige value for males.

Unfortunately, no significant main effects emerge for the Sex variable. Over the St. John's sample of 224 subjects as a whole, indeed, both males and females

largely agree by ranking BRP speakers as the most prestigious, followed by SJU speakers, who in turn are followed by MC speakers. Both sexes, that is, rank standard dialect speakers highest on the status scales. In similar fashion, there are no significant differences due to subject sex with respect to the solidarity scale evaluations: both males and females perceive the non-standard SJL and OUT speakers to be significantly nicer, kinder, more friendly, likeable and hardworking than are the standard dialect speakers. Several subject variables, indeed, prove to be more significant than Sex: these include subjects' Occ(upation) (whether student, teacher, or worker), Age or Gen(eration) (parents vs. student offspring) and, within the student sample, Ed(ucational) Level. (Further details on these points are to be found in Clarke, forthcoming).

If results obtained via a verbal guise technique do not reveal significant male vs. female attitudinal differences to dialects which clearly enjoy divergent status rankings throughout the speech community under investigation, one may wonder whether indeed the Wolfram/Fasold hypothesis is a valid one. In order to conduct further empirical testing, let us turn to a second set of results obtained from the St. John's study. These consist of attitudes elicited by means of a direct questioning technique. It should be noted that such opinions cannot be viewed to be as revealing as those obtained from a verbal guise methodology, since subjects would now be consciously aware of the value judgments that they are making with respect to various dialect types. In other words, a direct questioning technique cannot be assumed to elicit genuine dialect stereotypes, but more overt or conscious attitudes.

The direct questionnaire which constituted the second part of the St. John's language attitude investigation was designed to elicit opinions on a number of language/dialect-related areas. For convenience, answers have here been grouped into ten basic themes. In the remainder of this paper, it will be demonstrated that Sex is significant as a subject variable only with respect to certain of these themes, i.e., with respect to a limited number of opinions concerning both standard and non-standard dialects and their speakers.

First of all, let us examine those questionnaire areas in which subject Sex seems to play little if any role with respect to the opinions given. If females are more status-dialect conscious, it is to be expected that they might identify more with those English dialects judged by the entire St. John's sample to be highest in status, even when these standard dialects represent Newfoundland-external forms of speech. Yet, as displayed in the tables at the end of this paper, answers to the Theme I questions--which deal with awareness of dialect differences--demonstrate no significant Sex oppositions. Answers to Question 1 show both males and females to be generally in agreement that BRP, MC, and OUT dialect speakers differ considerably from themselves, the British speakers most so and the Mainland speakers least so.² When it comes to difficulty of comprehension (Question 2), there are again no significant male/female differences; here, MC is generally perceived to be the least difficult to understand, OUT the most so. On Theme II (Questions 4-7)--which deals with awareness of social, religious and areal differences in St. John's speech--there are, rather surprisingly, no significant main effects for Sex. Females, that is, do not state that they perceive greater differences in St. John's speech than do males.

In similar fashion, there are four other questionnaire themes from which, rather surprisingly, few if any significant Sex differences emerge. The first of these is Theme IX, which deals in general with linguistic insecurity and defensiveness. Here, while males tend to be more bothered than are females by the prospect of having their speech corrected by a non-local standard dialect speaker, the reaction of the two sexes is nevertheless not significantly different. The second case, Theme X, has to do with opinions on the role that non-standard Newfoundland dialects should play both in the school system and in the future of the province; here, both sexes are slightly on the positive side with respect to the value of local dialect forms. The next theme--Theme IV--involves the rating of speakers of British, Mainland, St. John's and Outport dialects on the solidarity measure of friendliness. Here, it would be expected that male respondents might identify more with speakers of local dialects, and judge them to be significantly more friendly than would females. Yet once again no

significant Sex-based differences emerge here (see Questions 16-19). Indeed, results are almost the opposite to those expected. In five out of six cases, males of all groups rate the standard dialect speakers (British and Mainland) as somewhat more friendly than do females;³ and, again rather strangely, females find the non-standard Outport dialect speakers friendlier than do males.

The fourth area in which few significant Sex-based differences are to be found has been labelled Theme VIII; this has to do with the amount of dialect loyalty displayed by subjects to local non-standard dialects. Of the six questions in this area (numbers 32-37), subject Sex is significant in only two out of the eighteen total possible cases. In Question 32, males of the Occ sample have a significantly higher mean than do females of the same group; males more so than females, that is, believe that Newfoundlanders feel themselves to be different from Mainland Canadians. Females of all three groups, as might be expected, display higher means than do males on Question 37; that is, they judge "correct" speech to be more important to Newfoundlanders than do males. Yet in the remaining dialect loyalty questions, males have higher means than do corresponding female groups in no more than 50% of cases. In short, males do not display the amount of dialect loyalty to the "covert" prestige models, i.e., the non-standard dialects, that would be predicted on the basis of the sociolinguistic literature.

If subject Sex seems to have little impact on the attitudes and opinions subjects hold with respect to the general role and value of non-standard dialects or the likeability of their speakers, and if it appears to have a significant effect on neither their awareness of the various social and regional dialects with which they come into contact, nor the amount of insecurity they display with respect to other dialects, it may be asked whether Sex has any significance at all as an attitudinal variable. Fortunately, several themes from the direct question section of the St. John's language attitude study do indicate that subject Sex is indeed highly significant in a way which would logically follow from the sociolinguistic literature.

Of these areas, perhaps the most striking is Theme

III, which deals with attitudes to different regional dialects on "status" scales. Here, when asked whether local dialects sounded better than British or Mainland Canadian (Questions 8 and 10), as well as whether the former dialects were better than the latter for getting ideas across (Questions 9 and 11), males in the Generation sample had significantly higher means than did females on all four questions, and on Question 9 in the Student sample. Even in the seven cases where there are no significant Sex differences, male subject means are higher in each case than those of the corresponding female group. Here for the first time, then, males would seem to display the expected dialect loyalty to local dialects. In Questions 12 and 13, however, which involve the occupational status attributed British and Mainland speakers in the local context, females do not, as might be expected, give significantly higher ratings than do males to standard dialect speakers, though female means are in all cases higher than those of the corresponding male groups. Indeed, the means on Questions 14 and 15 would suggest that males are just as attuned as are females to the necessity of upward code-switching in the presence of a non-local standard dialect speaker; somewhat paradoxically, that is, males appear more aware of the value, in certain instances, of standardizing the dialect they speak.

A second area that tends to corroborate the Sex distinctions typically reported on in the sociolinguistic literature is Theme VI. This concerns the role of language as opposed to other factors in two situations relating to "status" (applying for a job, getting good grades), as well as in a "solidarity-related" situation (making friends). Let us consider merely the role of language or speech in these three situations. Figures for the other factors may be obtained from the tables; suffice it to say that of all five factors, speech was judged second in importance over the entire sample when it came to getting good grades, fourth when it came to applying for a job, and fourth in the case of making friends. Means on the speech questions (26d, 27b and 28d) show that females have significantly higher means than do males in five of the nine possible cases; indeed, in the remaining non-significant cases, female means are nevertheless higher than those of males.⁴

In similar fashion, Theme VII presents significant male/female oppositions which relate fairly well to the findings of the sociolinguistic literature. These occur in Question 31, and involve the importance subjects attribute to good speech. As can be seen, females of all three groups judge good vocabulary to be significantly more important than do males, and female students are also significantly higher than male students with respect to the importance they accord good grammar. While other results for this question are not significant, it is to be noted that in each case female means are higher than the corresponding male means.

Theme V, which deals with the appropriateness of both local and non-local dialects in different regional contexts, does not produce as many significant Sex-based differences as do the three areas just mentioned (Themes III, VI and VII). In Theme V, dialect speakers are again evaluated on status and solidarity measures. On the status or high-paying job scale, significant subject Sex differences are found in only three instances (Questions 22c, 23a and 23c): females in the Occ sample feel significantly more strongly than males that a St. John's accent will prove an advantage in getting a high-paying job in a Mainland context such as Toronto; similarly, females from the Gen and Occ samples give higher scores than do males with respect to the likelihood of Outport speakers finding good jobs in St. John's and Toronto, respectively. If any conclusion emerges here, it is perhaps that females are somewhat more optimistic and perhaps less realistic than are males, since they seem to be less aware of the fact that a non-standard dialect speaker might well be downgraded in a more standard dialect area. On the two solidarity-assessment questions (Questions 24 and 25), only one significant sex-based difference arises. Thus in 24c, female respondents in the Occ sample have a significantly higher mean than do males, in that they judge a St. John's speaker more likely to make friends in a Mainland city such as Toronto. Once again, then, females display a surprisingly greater tolerance towards non-standard accent types in situations where a standard accent might be more appropriate. Interestingly, while female means are on the whole higher on the solidarity questions, the male loyalty to local non-standard dialect types does nevertheless come

through, particularly in the Gen and Student samples. Clearly here, other variables such as age, education and social class would have to be taken into account if the entire picture is to emerge.

To sum up, then, an examination of attitudes to standard and non-standard dialects in St. John's has shown subject Sex not to be a significant variable with respect to indirectly-elicited dialect stereotypes, and of limited significance when it comes to more directly elicited attitudes. In this latter case, females appear to be more sensitive than males to the "status" of standard vs. non-standard dialect speakers, the general importance of language in getting ahead, and the importance of good vocabulary. In those instances where Sex does prove to be a significant subject variable, in other words, the opinions displayed by females are largely in keeping with the predictions of the sociolinguistic literature. Nevertheless, the significance of Sex-based differences for Theme V--the appropriateness in standard regional contexts of local non-standard dialect types--suggests a conclusion not usually put forth in the literature, namely that females are actually more tolerant than are males with respect to non-standard dialect speakers. Perhaps, then, while females may be more conscious than are males of the social value of speaking "correctly" themselves, they are nevertheless not as prone as might be expected to downgrade others on the basis of their speech.

If from an overall viewpoint Sex is not extremely significant in the formation of attitudes and stereotypes with respect to speakers of various dialect types, the St. John's study has pointed to a number of subject variables that are possibly more significant than Sex in this regard. Thus the Occ(upation) variable, which compares the reactions of teachers, students and workers, shows that teachers are significantly more aware than are the other two groups of St. John's-internal dialect differences, tend to assign less status to local dialect speakers than do students and workers, and generally prove to be the group which displays the least loyalty to local dialects. Workers, on the other hand, provide responses on several themes that are similar to those of females. Thus workers tend to share with females the belief that non-standard dialects are appropriate in regional contexts which

would typically demand a standard dialect; and workers, like females, tend to place the most importance on good speech. Interestingly, of the four student groups examined--high-school academic, high-school non-academic, first-year university, fourth-year university--a patterning similar to that of the females and the workers was displayed by the high-school non-academic group, or the group which might be expected to be the lowest of the four student groups in socio-economic terms. What all this might suggest is that, in general, females do indeed have much in common with those sectors of the community representing lower socio-economic levels; all of these groups seem most conscious from an objective viewpoint of the value of good speech, yet also--somewhat paradoxically--appear less aware of the possibility that non-standard speakers may be downgraded on the basis of their speech.

Footnotes

1. Research reported on in this paper was made possible through Social Sciences and Humanities Council of Canada Research Grant No. 410-77-0039-S1 to S. Clarke and L. Smith.
2. Note that the means are calculated on a 1-7 scale, with the value 7 representing the positive extreme (e.g. in Question 1, the higher the mean, the more different the dialect is felt to be from the subjects' speech; in Questions 4-7 etc., the higher the mean, the more subjects feel that the differences in question exist). Analysis to discover significant differences among subject group responses was conducted using the ANOVA program of the SPSS (Statistical Package for the Social Sciences) computer package.
3. Rather paradoxically, the one significant Sex-based difference on this Theme arises in Question 21, where males from two sample groups are nevertheless more of the opinion than are females that British speakers would have difficulty in making and keeping friends in St. John's.
4. Interestingly, all female groups also feel that dress, intelligence and personality are more important than do the corresponding male groups. Yet a number of the male groups judge social class to be of greater

importance than do the corresponding female groups. This later observation may well relate to the results on Theme V, where males prove to be somewhat more "realistic" than do females.

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THEME I: AWARENESS OF REGIONAL DIALECT DIFFERENCES

(In this as in all following tables, an asterisk indicates a significant result at either the .01 or .05 probability level)

	OCC		GEN		ED LEVEL	
	F	M	F	M	F	M
1. How different from your own speech is the speech of:						
a) the average British speaker?	6.23	5.83	6.31	6.22	6.39	6.14
b) the average Mainland Canadian speaker?	4.52	4.48	4.25	4.81	4.75	4.97
c) the average speaker from a small Nfld. outport?	5.23	5.23	5.25	5.09	5.45	5.33
2. How difficult do you find it to understand:						
a) the average British speaker?	3.25	3.02	2.84	3.34	3.23	3.58
b) the average Mainland speaker?	2.31	1.90	1.84	2.13	2.00	2.44
c) the average Outport speaker?	3.65	3.63	3.00	3.31	3.92	3.91
3. Do people in St. John's speak differently from people in Newfoundland outports?	5.44	5.65	5.88	5.31	5.64	5.46

THEME II: AWARENESS OF SOCIAL, RELIGIOUS AND AREAL DIFFERENCES IN ST. JOHN'S SPEECH

	OCC		GEN		ED LEVEL	
	F	M	F	M	F	M
4. Do St. John's residents from different social classes speak differently?	5.58	5.38	5.72	5.31	4.94	5.08
5. Do you use different styles of speech in different social situations here in St. John's?	4.60	5.33	4.56	4.59	4.89	5.02
6. Do people from different parts of St. John's speak differently?	4.77	4.79	4.59	4.63	4.35	4.61
7. Do St. John's Catholics speak differently from St. John's Protestants?	2.89	2.50	2.88	2.50	2.30	2.53

THEME III: ATTITUDES TO DIFFERENT REGIONAL DIALECTS
ON "STATUS" SCALES

	OCC		GEN		ED LEVEL	
	F	M	F	M	F	M
8. Does "St. John's Irish" sound better or worse than the typical Mainland Canadian way of speaking?	4.40	4.67	4.16*	5.00*	4.28	4.58
9. Is "St. John's Irish" better or worse than typical Mainland Canadian for getting ideas across?	3.96	4.57	3.84*	4.78*	4.11*	4.79*
10. Does the Outport way of speaking sound better or worse than typical Mainland Canadian way of speaking?	2.77	3.33	2.31*	3.34*	2.70	3.06
11. Is the Outport way of speaking better or worse than typical Mainland Canadian for getting ideas across?	3.17	3.38	2.66*	3.84*	2.94	3.40
12. How high-paying a job would a British person hold in Newfoundland?	5.71	5.46	5.63	5.13	5.70	5.53
13. How high-paying a job would a Mainlander hold in Newfoundland?	5.54	5.23	5.34	5.25	5.61	5.22
14. Would you use a different style of speech to a Mainlander as opposed to a Newfoundlander?	3.31	3.50	3.09	2.81	3.44	3.31
15. Would you use a different style of speech to a British person as opposed to a Mainlander?	2.56	3.19	2.78	2.53	3.08	3.55

THEME IV: ATTITUDES TO DIFFERENT REGIONAL DIALECTS
ON "SOLIDARITY" SCALES

	OCC		GEN		ED LEVEL	
	F	M	F	M	F	M
16. How friendly is the average British person?	4.29	4.17	4.28	4.69	4.41	4.66
17. How friendly is the average Mainlander?	3.73	4.06	4.00	4.53	4.09	4.28
18. How friendly is the average St. John's resident?	5.44	5.52	5.22	5.69	5.41	5.36

THEME IV: ATTITUDES TO DIFFERENT REGIONAL DIALECTS
ON "SOLIDARITY" SCALES (continued)

	OCC		GEN		ED LEVEL	
	F	M	F	M	F	M
19. How friendly is the average Outport resident?	6.19	5.83	6.28	6.25	6.17	5.78
20. Would it be difficult for a person with a Mainland accent to make and keep friends in St. John's?	2.60	2.77	2.09	2.75	2.52	2.92
21. Would it be difficult for a person with a British accent to make and keep friends in St. John's?	2.54*	3.25*	2.25*	3.31*	2.75	3.19

THEME V: APPROPRIATENESS OF DIFFERENT DIALECT TYPES IN DIFFERENT
REGIONAL CONTEXTS (ON BOTH STATUS AND SOLIDARITY MEASURES)

	OCC		GEN		ED LEVEL	
	F	M	F	M	F	M
22. Would typical St. John's speech be an advantage or a disadvantage in getting a high-paying job						
a) in St. John's?	3.90	4.29	4.31	4.28	4.50	4.38
b) in a Nfld. outport?	4.15	4.33	4.47	4.00	4.61	4.38
c) in a Mainland city such as Toronto?	3.40*	2.77*	3.28	3.22	2.88	3.19
23. Would a typical Outport accent be an advantage or a disadvantage in getting a high-paying job						
a) in St. John's?	3.31	2.85	3.38*	2.75*	3.00	3.03
b) in a Nfld. outport?	4.67	5.02	4.81	5.00	5.17	5.16
c) in a Mainland city such as Toronto?	3.00*	2.19*	2.50	2.16	3.00	2.19
24. Do you feel that a St. John's accent would be an advantage or a disadvantage in making friends						
a) in St. John's?	5.21	5.17	5.19	5.47	5.50	5.19
b) in a Nfld. outport?	4.21	4.02	4.50	4.13	4.13	4.03
c) in a Mainland city such as Toronto?	4.19*	3.52*	3.91	4.19	3.67	3.78

THEME V: APPROPRIATENESS OF DIFFERENT DIALECT TYPES IN DIFFERENT REGIONAL CONTEXTS (ON BOTH STATUS AND SOLIDARITY MEASURES) (continued)

	OCC		GEN		ED LEVEL	
	F	M	F	M	F	M
25. Do you feel that an Outport accent is an advantage or a disadvantage in making friends						
a) in St. John's?	4.31	4.08	4.53	4.22	4.17	3.83
b) in a Nfld. outport?	5.33	5.69	5.41	5.53	5.78	5.75
c) in a Mainland city such as Toronto?	3.10	2.81	3.06	3.41	2.56	2.58

THEME VI: IMPORTANCE ATTRIBUTED TO LANGUAGE (AS OPPOSED TO PERSONALITY, INTELLIGENCE, DRESS, SOCIAL CLASS) IN VARIOUS SOCIAL SITUATIONS

26. WHEN APPLYING FOR A JOB
Overall ranking by mean:

- (1) Personality (6.43)
(2) Intelligence (6.22)
(3) Dress (5.84)
(4) Speech (5.73)
(5) Social Class (3.74)

	OCC		GEN		ED LEVEL	
	F	M	F	M	F	M
a) Personality	6.56	6.29	6.75*	6.25*	6.72*	6.19*
b) Intelligence	6.29	6.23	6.56*	6.09*	6.41*	6.03*
c) Dress	5.83	5.63	5.84	5.77	5.86	5.63
d) Speech	5.92	5.29	6.25*	5.28*	6.03*	5.28*
e) Social Class	(p = .059) 3.63	3.67	3.25	3.88	3.75	3.97

27. IN GETTING GOOD GRADES
Overall ranking by mean:

- (1) Intelligence (6.40)
(2) Speech (4.76)
(3) Personality (3.74)
(4) Social Class (2.71)
(5) Dress (2.42)

	OCC		GEN		ED LEVEL	
	F	M	F	M	F	M
a) Intelligence	6.34	6.31	6.47	6.16	6.47	6.33
b) Speech	5.11*	4.33*	5.56	4.97	5.13*	4.57*
c) Personality	3.53	3.44	3.78	3.69	3.78	3.81
d) Social Class	2.77	2.50	2.63	3.00	2.69	2.79
e) Dress	2.45	2.13	2.21	2.59	2.11	2.24

THEME VI: IMPORTANCE ATTRIBUTED TO LANGUAGE (AS OPPOSED TO PERSONALITY, INTELLIGENCE, DRESS, SOCIAL CLASS) IN VARIOUS SOCIAL SITUATIONS (continued)

28. IN MAKING FRIENDS IN ST. JOHN'S

Overall ranking by mean:

- (1) Personality (6.42)
- (2) Dress (4.22)
- (3) Intelligence (4.20)
- (4) Speech (4.05)
- (5) Social Class (3.76)

	OCC		GEN		ED LEVEL	
	F	M	F	M	F	M
a) Personality	6.60	6.40	6.28	6.13	6.61	6.33
b) Dress	3.92	3.75	3.97	4.03	4.34	4.70
c) Intelligence	4.33	3.79	4.41	3.78	4.52*	3.89*
d) Speech	4.06	3.42	4.41*	3.31*	4.39	4.13
e) Social Class	3.67	3.50	3.38	3.53	3.73	4.17
29. Do people make fun of someone who speaks too well?	4.28	5.10	5.03	5.34	5.00	5.22

THEME VII: AWARENESS/IMPORTANCE OF VOCABULARY VS GRAMMAR VS PRONUNCIATION

	OCC		GEN		ED LEVEL	
	F	M	F	M	F	M
30. How noticeable is each of the following when you hear a type of English different from your own?						
a) Pronunciation	5.94	5.77	5.59	5.75	5.77	5.64
b) Words chosen	5.15	5.15	4.66	5.19	5.14	5.13
c) Grammar	5.38	5.19	4.97	5.13	5.38	5.13
Overall ranking by mean:	(1) Pronunciation (5.71) (2) Grammar (5.31) (3) Vocabulary (5.02)					
31. How important do you consider						
a) good pronunciation?	5.98	5.56	6.13	5.66	5.89	5.44
b) good vocabulary?	6.19*	5.50*	6.19*	5.50*	6.00*	5.45*
c) good grammar?	6.04	5.65	5.94	5.41	5.95*	5.30*
Overall ranking by mean:	(1) Grammar (5.91) (2) Vocabulary (5.89) (3) Pronunciation (5.88)					

THEME VIII: LOYALTY TO/PRIDE IN
LOCAL DIALECT FORMS

	OCC		GEN		ED LEVEL	
	F	M	F	M	F	M
32. Do Newfoundlanders think they are different from Mainland Canadians in general?	5.29*	5.94*	4.94	5.31	5.33	5.50
33. Do Newfoundlanders think that they speak a type of English different from that spoken by Mainland Canadians?	5.06	5.52	5.25	5.28	5.28	5.13
34. Do Newfoundlanders have a sense of pride in being Newfoundlanders?	6.17	6.52	6.50	6.69	6.48	6.42
35. Do Newfoundlanders have a sense of pride in the type of English they speak?	4.96	4.83	5.22	5.41	5.16	5.00
36. How important is it for Newfoundlanders to retain the Newfoundland character of their speech?	5.15	5.04	5.47	5.16	5.27	5.02
37. How important is it for Newfoundlanders to have speech that is judged "correct" and "standard" by non-Newfoundlanders?	3.44	3.33	3.72	3.41	3.81*	3.08*

THEME IX: LINGUISTIC INSECURITY/DEFENSIVENESS

	OCC		GEN		ED LEVEL	
	F	M	F	M	F	M
38. Would it bother you to have your speech corrected by						
a) a St. John's speaker?	3.48	4.23	3.59	3.25	3.38	3.78
b) an Outport speaker?	4.48	4.23	4.28	3.28	4.61	4.11
c) a British speaker?	4.88	5.36	4.44	5.03	5.00	5.02
d) a Mainland speaker?	5.13	5.50	4.81	5.09	5.61	5.50

Overall ranking by mean:

- (1) Mainland speaker (5.20)
- (2) British speaker (4.192)
- (3) Outport speaker (4.21)
- (4) St. John's speaker (3.59)

THEME X: OPINIONS ON ROLE OF NON-STANDARD DIALECTS IN
NEWFOUNDLAND SCHOOLS, AND IN NEWFOUNDLAND'S FUTURE

	OCC		GEN		ED LEVEL	
	F	M	F	M	F	M
39. Do you feel that it would generally do a child more harm than good if a teacher attempted to correct his dialect?	4.04	3.98	3.94	4.63	3.94	4.06
40. Do you feel that speaking a distinct Newfoundland dialect would on the average result in faster or slower learning for a child in a Newfoundland school?	3.93	3.79	4.29	4.06	3.92	4.06
41. Do you feel that a child who does not learn standard English might eventually have difficulty in getting a high-paying job in St. John's?	4.07	4.08	4.13	4.38	4.27	4.23
42. Do you think that Nfld. dialects will disappear in the future if nothing is done to prevent this?	3.74	3.83	3.84	3.72	3.48	3.17
43. Do you care if Nfld. dialects disappear?	4.75	5.25	5.06	5.63	5.02	5.06
44. Do you think that it is possible to prevent Nfld. dialects from disappearing?	4.92	5.17	4.88	5.19	5.20	5.22
45. Should we try to prevent Nfld. dialects from disappearing?	4.94	5.17	5.16	5.19	5.13	4.89
46. Should we try to eliminate Nfld. dialects?	1.77	1.96	1.72	1.97	1.69	1.73

Folk Etymology and Surname Change among the Wabanaki

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A common Yiddish story circulated by comedians along the borsch circuit at convenient watering spots from upstate New York to Florida tells how a Russian Jewish family around the turn of the century obtained the Irish family name of Ferguson upon arrival at Ellis Island. As the story goes, in the course of the long trip from eastern Europe to North America, the family-head had long rehearsed the surname he wanted to adopt. Upon being confronted by the immigration officials and in the excitement of being in new and unfamiliar surroundings at Ellis Island, the immigrant lost both his confidence and his memory. "Ich hob vergessen," (I've forgotten) was all he could utter when asked his name. The official, thinking the man had said Ferguson, promptly recorded this as the man's family name.

This improbable Yiddish story makes for light hearted, good humor. If the Maliseet and Micmac, however, knew how some of their family names came into being or barely avoided coming into being, an equally fantastic story could be told. This time, nevertheless, the accounts would fall within the realm of fact and not of folklore.

In most cases the family names of the Maritime Indians were given by French speaking missionaries and clergymen at baptism. Most Indian family names were originally first names. If some of these Christian names no longer show their original French pronunciations, it is only because either the names have subsequently undergone phonetic modification as French was replaced by English as the second language of the Maritime native peoples, or clergy and public officials no longer recognized the French protoforms.

A few examples should suffice: the family name François is now Francis, Denis is often Dana, especially among the Indians of Maine; Thomas, however, is still Tomah or Tomer; but Paul and Augustine are always pronounced as English names; Vincent, now extinct as an Indian family name, appears in the church records as Bessain.

Other Indian family names, although no longer transparent as baptismal names given by the church fathers, still owe their origin to this source.¹ Sapier comes from Jean Pierre; Sabattis is from Jean Baptiste; Socobassin is from Jacques Vincent; Soctomah is from Jacques Thomas; Atwin is from Etienne as well as Antoine. Polchies and Polsis are both of mixed origin. Polchies is a French-Micmac form, while Polsis is a French-Maliseet-Passamaquoddy or French-Penobscot form. In each case the name literally means 'little Paul', but often in fact referred to 'son of Paul.'

Given this overwhelming influence from French, we are forced to ask: are there really no "Indian" names which survived the missionaries' enthusiasm in the Maritimes? Neptune (originally Neptan) is one, found at present among the Passamaquoddy and Penobscot in Maine, but once widely recorded in Micmac and Maliseet territory too. Meuse and Pritch appear to be old Micmac names. Bear, when a translation from moowin in Micmac or wehsos in the languages of the groups to the south, also falls into this group of old Indian names.

What concerns me in this paper, however, are names that look deceptively European but are not from the church fathers, and for this reason are viewed by Indian and non-Indian alike as being not quite respectable. Lurking in the back of the mind of all is the assumption that somewhere in the distant past is a white man who passed along both his genes as well as his name to the Indians with or without the benefit of holy matrimony.

Upon scoring musty church books and tracking down newly prepared microfilms in pursuit of Indian family names, I began to realize how unfair this assessment of imputed white paternity is in some cases. If folklore can give a Russian Jew the name Ferguson, facts reveal how a man who called himself Bear almost got a French name on the one hand and an Irish name on the other. Facts can also show how other now common Micmac, Maliseet and Passamaquoddy names arose through folk etymology and related misinterpretations. It is some recent research on a number of these problems that I would like to share with you today.

Bear

When I discovered an 1841 census for the Tobique Reserve at the New Brunswick Museum some years ago,² I was surprised to find several family names which - on first impression - looked French to me. One of these was Ambroise Hébert. My first

reaction was to assume that he was a French Canadian who had married an Indian woman of the Tobique band and who had settled on the Tobique reserve.

Curé Antoine Gosselin, a French Canadian, born on Île d'Orleans, and since 1838 priest at Saint Bruno Roman Catholic Church at Van Buren, Maine, prepared the census.

Last winter I scanned the church records of Saint Bruno Church and not surprisingly discovered that Curé Gosselin had recorded materials on the family of Ambroise Hébert here as well. In 1839 one of his children was baptized. Two years later another child of Ambroise and his wife Natalie Thomas was baptized by Curé Gosselin. This time, however, Ambroise is listed with the surname of Bear.³ The confusion of Bear with Hébert does not occur in later entries at Saint Bruno Church.

The Parish priest at St. Leonard, however, made the same mistake in 1859. Lola Bear, a son of Ambroise Bear, is listed as Laurent Hébert along with his wife Mary Anne Simons. In the 1861 Tobique census, however, the pair are listed as Loler Bear and Mary.

The confusion involving the family name Bear is not limited to the French speaking area of the province. If at the end of the 1830's there was a possibility of the Bear family becoming Hébert at Tobique, at about the same time there was a possibility that the Bears might become O'Bear at Kingsclear, N.B. I discovered a reference to a Maliseet captain named Sock O'Bear who participated in the selection of a chief of the Penobscot Indians at Old Town, Maine, in 1839. Williamson, who recorded the incident, was English speaking.⁴ In 1832 a long list of persons who proposed to settle at "the Village" (Kingsclear, N.B.) was drawn up.⁵ Among the persons on this list is Saco Losbear. Obviously Sock O'Bear and Saco Losbear are one and the same individual. Although his name does not appear in the Kingsclear or Fredericton church records, we can assume that Sock O'Bear and Saco Losbear refer to a Jacques Bear (possibly a Jacques Joseph Bear).⁶

In this transition period when the Bears were shifting from French to English as their first non-Indian language, confusion of the type found above is to be expected. This would especially be the case if the person doing the recording was a priest new to the parish or a public official or an other person who was not knowledgeable about probable Indian family names in the area.⁷ A French speaking priest might

very well hear Bear as Hébert, and an English speaking person might hear it as O'Bear as, indeed, was the case. In time the name became codified as Bear, however, in all Maliseet communities.

Knockwood, Lockwood and Lacoot.

One of the most widespread Maritime Indian family names recorded by Father Bailly in the period 1768 to 1770 is Naukaud.⁸ It is found distributed throughout all the Micmac areas of New Brunswick and Nova Scotia as well as in Ekpahak (1770, now Kingsclear, N.B.) in the heart of Maliseet territory. Curé Ringuette and other clergy at St. Basile (near Edmundston, N.B.) list it, or a variant form, as did the clergy at St. Malachy's (St. John, N.B.), St. Dunstan's (Fredericton) and St. Anne's (Kingsclear) and the 1851 census official for Kingsclear.

Spelling variations during an eighty-one year period (1770-1851) in Maliseet territory are Naucaude, Ne'kauad, Naukaut, Neakaut and Saughcut, as well as La Côte, LaCoote, La Coute and Lacaut.

Among the Micmac the name must have been undergoing a similar transformation during this period. Gilpin (1974: 116)⁹ mentions having discovered Nocot, Nogood, and Nuffcoat in Nova Scotian records. He, apparently, is the first person to point out the relationship of the 19th century Micmac name to the modern Micmac one, which is Knockwood. Gilpin writes, "... Nocot, Nogood, Nuffcoat, may all come from Knockwood (1974:116)." I think the evidence clearly points to a change in the reverse direction. Knockwood is the modern spelling and pronunciation of all the Micmac forms which have been recorded as Naukaud, Nocot, Nogood and Nuffcoat.

Support for this assumption comes from a more detailed tracing of the development of the modern Maliseet family name Lockwood.

While Naukaud is the earliest spelling of the name in Maliseet territory (1770), as early as 1792 it appears as La Côte, reverting to Ne'kauad again in 1822. In the 1830's and 1840's, it appears as a variant of La Côte (La Coote, la Coute, Lacaut) especially by both clerical and secular writers at Kingsclear and Fredericton.

In the 1840's, however, the name practically disappears from the central St. John River area. It is recorded, nevertheless, on an 1837 map of St. Croix, N.B. Today the name Lacoot survives only among the Passamaquoddy in Maine. Obviously they are descendents of the Maliseet family who moved from Fredericton-Kingsclear first to St. Croix, and from there to the Passamaquoddy reserves.

Not all the LaCôtes appear, however, to have gone to or to have stayed in Maine. Two sons, a daughter, and the widow(?) of Jean Baptiste La Côte moved to the Tobique reserve as adults in late 1869 or early 1870. Perhaps the widow La Côte had come originally from the Tobique reserve, and in the absence of her husband had returned home with her adult but unmarried children. One son, Ambroise, and a daughter Anne, married and remained at Tobique with their mother. In the frequent entries in the Tobique church records, the family name is spelled either Lockwort or Lockwoot by an English-dominant priest. On the one occasion when a French priest was resident at Tobique between the years 1883 and 1885 the spelling reverted to La Côte. In 1886 the name is first recorded in the church books as Lockwood and has retained this spelling until the present day.¹⁰

Likely with this change in spelling, the pronunciation of the final vowel in the name underwent a change from [u] (tense high back rounded) to [ʊ] (lax high back rounded). This phonetic change likely took place because of the dominance of an English family, the Lockwoods, who lived in the Perth-Andover region near the Tobique reserve. One or another English speaking priest or government official must have believed that the two families, if not having the same ancestry, at least shared a name from a common source. The first assumption is clearly wrong, the second is likely false.

In short, I would like to suggest that there is considerable evidence that the contemporary pronunciation and spelling of the Indian family names Knockwood and Lockwood came about through folk etymology. If we assume that the original pronunciations were a close approximation of Curé Bailly's spelling, Naukaud, the renditions Nocot, Nogood and Nuffcoat suggest, at least, meaningful units to the English ear and eye.

In Maliseet-Passamaquoddy territory, however, the [n] was replaced by an [l], especially in the French speaking region of New Brunswick. The extent to which folk etymology applies here, however, is debatable. Perhaps the pronunciation

of the original form was Naukaud as Curé Bailly, apparently the first person to list the name, recorded it. French priests at Saint Basile as early as 1792, however, began recording it from time to time as the French name La Côte. Folk etymology could have played a role in this change. If Naukaud means nothing to a French speaker, La Côte does. La Côte, originally written as a correction by a French priest, came to be seen as the proper spelling, by other French speakers, of an Indian mispronunciation.

There is a possibility, however - and this is the interpretation that I favor - that Curé Ringuette's spelling of La Côte is correct in that the Indian name came from a French source, and that Father Bailly made an error in the 1760's and 1770 in assuming that the name was Indian, and recorded it as Naukaud. If this is so and if Gilpin has recorded all the Micmac variants, clergy and public officials in Micmac territory apparently have never caught Bailly's initial mistake.¹¹ Knockwood clearly is based on the assumption that the initial consonant of the name was an alveolar nasal. Clergy, government officials, the Maliseet-Passamaquoddy themselves, and other whites along the St. John River in time, reached the consensus that the initial consonant of the name was an [l].

Nevertheless, folk etymology or related processes were responsible for the change from La Côte (also La Coote, la Coute, Lacout and Lacaut) initially to Lockwort, then Lockwoot, and finally Lockwood at the Tobique reserve.

Summary

The recording of family names in an unwritten language by non-native speakers is certain to lead to a period of instability in the writing of these names. This is well documented in the history of the writing of two contemporary Maliseet family names, Bear and Lockwood. Unfamiliarity of the native language on the part of the 18th and 19th century French and English who recorded these names is responsible for the changes discovered. French speaking writers tended to hear and record the names as French, English speakers as English. Folk etymology to some extent is responsible for gradual alterations in the pronunciation and spelling of the name Lockwood. The human mind, apparently, abhors uncertainty and the ambiguous. Any change in the pronunciation of a word which can superficially lead to a connection with an unambiguous form will be adopted in time.

Footnotes

- 1 Frank G. Speck in Penobscot Man: The Life History of a Forest Tribe in Maine (University of Pennsylvania Press 1940, page 251) provides additional data on Penobscot names.
- 2 New Brunswick Museum, Archives Section, Ganong Coll. Box 38, Shelf 107.
- 3 The name Bear appears interspersed with the surname St. Aubain (also Aubin) over more than a hundred year period. E. Tappan Adney has compiled the most extensive data on the Bear family in the middle 18th century (See his Unpublished Manuscripts 1887-1950. Box 4 page 16. Microfilm copy at the Harriet Irving Library, University of New Brunswick, Fredericton, N.B.). Adney notes that a Noel called Muin was chief of Meductic in the period of the 1730's or 1740's. His son was Peter Muin, also chief at Meductic in 1759-1760. The name Ambroise Var (likely an incorrect rendering of Bear) appears in a 1776 treaty with the Americans. This is likely the same person as Ambroise St. Aubain, one of the two leading Maliseet chiefs during the Revolutionary War. Father Bailly records the name only as St. Aubain, as do the early priests at St. Basile. The variant St. Aubin (also Aubin) appears frequently in the church records of the Maliseet communities of Isle Verte, Cacouna and St. Epiphane in Quebec until 1890. On the upper St. John the name appears as Saintonbain in 1793 and beut (Bear) Saint Ovent in 1794. The name is recorded as Vert at Kingsclear in 1818 and as Bear continuously from then on except for minor variations in spelling beginning in the 1820's. In the upper St. John River region there was clearly a period of confusion on how to write the name. St. Aubain came to be replaced by Bear, but only through the intermediate stage of Hébert in the 1839-1841 period.
- 4 William D. Williamson in "Indian Tribes in New England," Massachusetts Historical Society Vol. 9, Series 3, 1839. page 95, writes in reference to Sock O'Bear, he "... was a captain of good appearance, and of considerable consideration among them."

- 5 This source is deposited at the New Brunswick Museum Archives in Saint John and carries the location number F - 68.
- 6 There are several other Bears listed in the church records, but at Kingsclear and Fredericton the name always appears as Bear (Bare etc.).
- 7 The danger of making such a mistake is all too possible even in the 20th century. In January 1966, I was at the Peter Dana Point Indian Reservation near Princeton, Maine, employed by the Maine State Department of Indian Affairs. An Indian whom I met at the time told me that his real name was Abner Paul, but that everyone called him [sæməgus]. I was intrigued and asked him to repeat it several times, which he did. When I repeated it back to the assembled group, all the Indians except Abner burst out laughing. "His name is Sam Goose" they said. The person recording the names Jacques, Ambroise and Lola Bear must have found himself in the same difficulty. Jacques Bear likely pronounced his name as [sakəbEr]. Recording it as Sock O'Bear, therefore, is not surprising. A French priest, not realizing that Bear is a family name, likely heard it as Hébert.
- 8 The two Bailly sources are "Registre de la Mission d'Ekouipahag...commence au mois d'Août 1767...par Charles François Bailly" (deposited at St. Basile Roman Catholic Church, St. Basile, N.B.) and "Register of Baptisms, Marriages and Funerals conducted in Nova Scotia or Acadia beginning July 1763 by Charles François Bailly" (at St. Pierre Roman Catholic Church, Caraquet, N.B.).
- 9 This source was originally published in Nova Scotia Institute of Science Proceedings and Transactions, 4, (1875-1878), 250-281.
- 10 The 1871 census for the Tobique records the Maliseet name as Lockwood. The 1881 census gives it as Lockwoot.
- 11 Support for the assumption that the original consonant in the name was [l] and not [n] comes from another widespread Wabanaki name recorded by Father Bailly during the same period. This is Nabelmont which, while now extinct, appeared in many variations in the 19th century. Nabelmont almost certainly comes from le bel mont. If Nabelmont comes from le bel mont, Naukaud almost certainly comes from la côte. Given the data at my disposal it is impossible to determine when the name was adopted by the Indians of the northeast. Neither Naukaud or Nabelmont appear in a very complete census compiled in 1708 (Recensement nominal de tous les Sauvages, 1708, Ayer Ms. 751, Newberry Library, Chicago).

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- Gilpin, J. Bernard. 1974. Indians of Nova Scotia, ch. 12, pp. 102-19, in Harold Franklin McGee, Jr., *The Native Peoples of Atlantic Canada: A History of Ethnic Interaction*. Toronto: McClelland and Stewart.

Des caporals, jouals et autres animaux

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Si nous en croyons les auteurs de nos grammaires scolaires, de l'ancienne opposition entre les formes du singulier et celles du pluriel des noms français, il ne reste de vivant que le couple -al, -aux: un journal, des journaux, principal, principaux. Seuls quelques mots en -al suivent la règle générale du pluriel et prennent un s, qui ne se prononce d'ailleurs pas. La Grammaire Larousse du français contemporain (p. 172, parag. 258) donne une liste et une explication succinctes de ces prétendues exceptions:

" quelques substantifs, pour la plupart récemment introduits, ont un pluriel en -als: aval, bal, cantal, caracal, carnaval, cérémonial, chacal, festival, gavial, mistral, narval, nopal, pal (parfois des paux), récital, régal, rorqual, serval, sisal, etc... Idéal hésite entre idéals et idéaux."

Les adjectifs forment leur pluriel comme les substantifs. Selon le "Précis de grammaire" du Nouveau petit Larousse (p. 1108),

" la plupart des adjectifs en -al changent au pluriel -al en -aux: un homme loyal, des hommes loyaux. Quelques adjectifs, peu usités au masculin pluriel, font indifféremment -als ou -aux: tels sont austral, boréal, pascal, etc. Mais les adjectifs banca, fatal, final, glacial, natal, naval, tonal, prennent s au pluriel." A ces prétendues exceptions, ajoutons banal: des romans banals, des fours banaux.

Telle est, outre Atlantique, la règle sur laquelle veillent instituteurs, professeurs, chroniqueurs de la langue, académiciens et qu'apprennent par coeur tous les écoliers. Mais ici l'usage local paraît beaucoup moins rigide. Nous verrons d'abord quelques faits. Puis nous nous efforcerons de les interpréter.

Dans le Parler franco-acadien et ses origines (p. 142). Pascal Poirier note que "les Acadiens disent un cheval, des chevaux; un canal, des canals; un chenal, des chenals (...)."

James Geddes (Study of an Acadian French dialect spoken on the North Shore of the Baie-des-Chaleurs, p. 109, parag. XLIII -6, list 109) fait observer que le franco-acadien, dans un effort

de simplification, tend à ne donner aux noms qu'une seule forme pour le singulier et le pluriel; à l'appui de cette assertion, il dresse une liste de douze mots: les fanals, les canals, les cardinals, les cristals, les hôpitals, les mals, les maréchals, les métailles (pour les métaux¹), les signals, les végétales, les chevaux, les journals. Bien entendu, les adjectifs en -al sont traités comme les substantifs de même terminaison; et l'on ne trouve qu'une seule forme pour brutal, libéral, principal, etc. (p. 113, parag. 7).

Gaston Dulong (Chéticamp, îlot linguistique du Cap-Breton, p. 15) remarque que:

" à Chéticamp, tous les mots en -al prennent un s au pluriel, suivant ainsi la règle générale. Canal, cheval, fanal et orignal font canals, chevaux, fanals, et orignals²."

Les observations des linguistes qui portent plutôt sur la langue parlée se trouvent souvent confirmées par les oeuvres littéraires et par la presse.

C'est ainsi que Marichette, qui à la fin du XIXe siècle écrit à l'éditeur de l'Évangéline, alors publiée à Weymouth (N.-E.), des lettres rédigées dans le parler de Clare, emploie pour le pluriel les formes chevals et libéraux:

" vous avez dit, il y a cheque temps que le cheval à Pite Doucet avait bité tout les autres cheval, à la race sur le lac Lawville un dimanche (Lettre du 14 mars 1895)"; "les p'tits libéraux pouvions pas sortir dans la street sans attraper des saces (Lettre du 27 août 1896)".

De même la Sagouine d'Antonine Maillet qui parle le franco-acadien de Bouctouche (N.-B.) dit des canals, des cardinals, des hôpitals:

" (...) il faut aouère été enterré sous la neige pour sortir avec sa hatchette se creuser des canals d'eau (La Sagouine,) p. 78"; il me r'semble que passer ma vie au mitan des anges, pis des papes, pis des cardinals, pis des saints sièges, il me r'semble que je serais pas à mon aise (op.cit., p. 81)";

1) Métailles ou métaills par attraction de médailles.

2) Orignal, du basque oregnac, pluriel de oregna, "cerf", (Robert). Pascal Poirier mentionne que les Acadiens prononcent origna. La forme orignaux (donnée par Robert) est donc peu logique.

Laurette à Johnny dit à tout le monde
 que je vas pas ouère le docteur parce qu'une
 fois rendue en ville, j'ai d'autre chose à
 faire là qu'à courir les hôpitals (op.cit., p. 93)".

Eutrope du Djibou de Laval Goupil, qui s'exprime dans le
 parler du Nord-Est du Nouveau-Brunswick, n'a aussi qu'une forme
 pour les mots en -al:

" des bûches de c'te grosseur-là, c'est yinque
 des peanuts à côté des âb' qui follait mouver
 d'place quand que les teams de jouals arriviont
 pas même à les grouiller d'in pouce (p.13)".

Dans Sacordjeu de Claude Renaud, Joseph use d'une forme
 de pluriel semblable:

" on a marché à peu près une vingtaine de pas,
 pis là, juste en face de nous autres, une
 famille d'originals! (p. 37)".

Les dialogues de Félix Thibodeau présentent eux aussi des
 formes plurielles en -als:

" si les rumeurs sont vraies, j'allons a'oir
 une femme pour représenter les libéraux (Dans
 note temps avec Mélonie et Philomène, Le Petit
 Courrier, 29 janvier 1976)";
 "si on voulait 'oir des beaux jouals à wâginne,
 c'était là qu'y faullait aller (op.cit., ibid.,
 15 juillet 1976)".

Des parlars franco-acadiens, l'usage des pluriels en -als
 s'est étendu au français local, tendant à créer une "usance",
 selon la définition qu'ont donnée de ce terme Damourette et
 Pichon (Des mots à la pensée. Essai de grammaire de la langue
 française, T.I, ch. III.).

C'est ainsi que le journaliste Hermel Vienneau écrit dans
 l'Evangéline du 6 septembre 1974:

" M. Mallet termine en affirmant que le creusage
 des chenals devrait être entrepris dans beau-
 coup de localités du Nord-Est (...)"

Mme Béatrice Doiron, enseignante, de Bas-Caraquet, dans
 un communiqué à l'intention des lecteurs du journal ignore
 aussi le pluriel en -aux:

" faire les démarches nécessaires pour obtenir
 les octrois provinciales et fédérales afin
 d'améliorer le sort de notre village (L'Evangéline,
 7 juin 1974)".

(Remarquons bien que le mot octroi est du genre masculin, et n'a jamais appartenu au genre féminin.)

Dans une conférence, un dirigeant acadien, membre d'une université, a parlé de comités inter- provinciaux et nationaux (XXX, à Z, 7 décembre 1975).

Comment interpréter cette tendance en français d'Acadie à la réduction du couple -al, -aux à -al(s)? Pour essayer de répondre à cette question, il convient d'examiner l'origine de la double forme -al, -aux, son développement historique dans le français rural et dans le français populaire de la région parisienne.

Selon A. Darmesteter et A. Hatzfeld (Le seizième siècle en France, pp. 224, 225, parag. 79),

" du XIIe au XIIIe siècle, la prononciation de l après une voyelle et devant une consonne passa à l'u: albe, palme, chevaux devinrent successivement aoulbe, paoulme, chevaouls; aoube, paoume, chevaous (écrits aube, paume, chevaux). Au moyen âge on était dans l'usage de remplacer le groupe latin ou français us par un signe abrégatif spécial, qui finit bientôt par se confondre avec la lettre X.

(...) les mots français dieus, chevaux furent donc écrits (...) diex, chevax. Au XIVe siècle, on vit dans lx de chevax, de diex, une notation spéciale, remplaçant non plus us, mais s. Or comme on entendait un u (ou) dans la prononciation du mot, on fit reparaître l'u: chevaux, et à la Renaissance, quand on voulut faire reparaître l'l du singulier, parce qu'on ne savait pas que cette l était déjà représentée par l'u, on écrivit chêvaux (...)

Au XVIIe siècle, on fit disparaître l'l de l'écriture; de là, notre orthographe actuelle (...)"

Nyrop [Grammaire historique de la Langue française, T. II, p. 211, parag. 294] observe que, parallèlement à ces mots en -al, -aux, d'origine latine ou depuis longtemps entrés dans le vocabulaire français, on trouve des emprunts, adoptés après le moyen âge, à qui l'on attribue d'abord le plus souvent un pluriel régulier en -als. C'est ainsi que l'on trouve au XVIe siècle: bocals, fanals, madrigals (chez Ronsard), piédestals, réals, caporals (chez Rabelais). Mais l'influence des mots en -al, -aux, s'est fait sentir petit à petit et, sur le modèle de cheval, chevaux, l'on s'est mis à dire bocal, bocaux. Cette hésitation entre le pluriel nouveau en -aux et le pluriel ancien en -als a gagné plusieurs mots remontant au moyen âge et l'on

a parfois écrit des bals, des canals (chez Rabelais), des cristals, des pals, des locals. Remarquons que le français académique a conservé, de ces formes refaites, bals et pals.

Ferdinant Brunot (La Pensée et la Langue, p. 101) souligne que la lutte entre les deux formes de pluriel fut longue et souvent indécise. Au XVII^e siècle, les Cahiers de l'Académie (p. 89) formulent enfin la règle: la plupart des mots en -al et -ail ont leur pluriel en -aux; ils donnent ensuite une liste de mots qui gardent le pluriel en -als et qui sont considérés comme des exceptions. Les difficultés ne pouvaient manquer d'être nombreuses: cristal, madrival, arsenal, amiral divisaient les grammairiens. On en arriva à décider que certains adjectifs en -al n'auraient pas de masculin pluriel: on pouvait dire un repas frugal, une table frugale, des tables frugales; mais on ne pouvait dire ni des repas frugaux ni des repas frugals. (Remarquons que le Petit Larousse n'hésite pas à dire aujourd'hui que les Spartiates étaient très frugaux.) De même à en croire le savant Ménage (Observations sur la langue française, Première partie, ch. CCXLII, p. 469, 471,

" On ne dit ni navals, ni navaux. Que si on est obligé de se servir nécessairement de l'un ou de l'autre de ces mots, il faudrait plutôt dire navals que navaux. Car qui a jamais dit des combats navaux? Combats navals n'est qu'une meilleure. Il faut donc éviter ces mots, en disant combats de mer, combats maritimes."

Boursault estimait cependant qu'on pouvait très bien dire des combats navals, forme que retient le Robert, tandis que Mme de Sévigné n'a pas hésité à parler de combats navaux (Littré, art. naval). Ces débats, quelque peu byzantins, prenaient parfois des allures comiques. Le soldat La Rissole de Boursault affirme avec incertitude: "Ces bras te deviendront ou fatals ou fataux (dans Nyrop, op.cit., p. 213)".

Du XVII^e siècle à nos jours, sous l'influence des grammairiens, les pluriels en -aux se sont affermis dans la langue académique. Cependant l'on trouve encore des hésitations: à "il fallait bien (...) des marchands et des étaux" de Paul Claudel s'oppose "dans la grande rue sale, les étaux se dressèrent" d'Arthur Rimbaud; à "de tous les idéals tu composais ton âme" de Victor Hugo s'oppose "l'humanité est certainement plus ample qu'aucun des idéaux qu'elle s'est formée" de Jean Rostand (Maurice Grevisse, Le bon usage, p. 244, parag. 278, Remarques 3, 4). Que dire de cette forme plurielle de mal employée par André Roussin sans guillemets, sinon qu'elle est des plus expressives alors que la forme régulière serait horriblement plate, voire impossible?

" Que serez-vous? Une femme? Comme les autres? Avec ses secrets, ses nerfs, ses tristesses? Avec ses mal-au-coeur, ses mal-au-ventre, ses mal-aux-dents, ses mal-au-dos, ses mal-au-nez, ses mal-aux-yeux, ses mal-à-la-tête, ses mal-aux-cheveux? (Un amour qui ne finit pas, dans Comédies dramatiques, p. 215)".

Il semble que l'on ne doive pas exclure l'hypothèse que les formes plurielles acadiennes des noms en -als pour -aux peuvent s'expliquer par le fait que les fondateurs ont quitté la France de l'Ouest avant que les grammairiens aient eu le temps d'imposer leurs normes.

L'étude des parlers régionaux donne-t-elle des indications plus décisives? Albert Dauzat (Phonétique et Grammaire historiques de la Langue française, p. 187) remarque que dans les patois actuels le peuple tend à généraliser la forme du pluriel et il note un chevau, un kevau. Ch. Cl. Lalanne, dans son Glossaire du Patois poitevin (p. XXXVII) observe que dans ce parler les noms terminés en français académique par -el, -al, font au singulier -au, donnant un chevau pour un cheval, alors qu'ils font au contraire -als au pluriel donnant des chevaux pour des chevaux. L'Atlas linguistique et ethnographique de l'Ouest - Poitou, Aunis, Saintonge, Angoumois de Geneviève Massignon et Brigitte Horiot (vol. II, carte C576) relève, dans la Charente-Maritime, l'opposition un chevau, des chevaux. En Anjou, alors qu'à Montjean on dit ein chevau, des chevaux, au Longeron on ne manque jamais de dire un chevau, des chevaux, selon A.-J. Verrier et R. Oillon (Glossaire étymologique et historique des Patois et des Parlers de l'Anjou, p. 196.) Mais en franco-acadien et dans le français d'Acadie nous ne trouvons point trace de cette opposition -au singulier, -als pluriel: "le cheval à Pite Doucet avait bité tout les autre cheval", avons-nous lu sous la plume de Marichette (voir citation plus haut). Le rapprochement avec les patois normands ne paraît pas non plus satisfaisant. Si Delbouille (Glossaire de la vallée d'Yères, p. 201) signale des formes plurielles comme marichals, journals, canals, hôpitals, mals, il donne aussi pour le pluriel de K'va (cheval) K'vas, passablement différent des chevaux ou jouals que nous pouvons entendre ici. Les formes qu'vax, ch'vax, j'vax relevées par Moisy dans son Dictionnaire de Patois normand, appellent la même observation. Bref, il ne semble pas qu'il faille voir dans les formes en -als pour -aux des parlers franco-acadiens une survivance de parlers régionaux de la France de l'Ouest.

Alors, à défaut de l'influence des parlers régionaux, faut-il chercher une influence du parler populaire? Nyrop (op. cit., p. 215, parag. 298), après avoir constaté dans la langue moderne littéraire une tendance à étendre au pluriel la forme du singulier des mots en -al, note que cette tendance est encore plus prononcée dans la langue vulgaire de Paris, et il cite

Bruant: "Tous les matins j'en jette un coup/Dans les journal". Dauzat (*op.cit.*, p. 187, Note 1) remarque que le peuple dit facilement des amirals, des caporals, que seuls les illettrés disent des journals, mais que ce "solécisme" est de plus en plus rare et qu'en fait les pluriels en -aux les plus usuels, comme chevaux, animaux, sont bien conservés. Henri Frei (*La Grammaire des Fautes*, p. 207) observe que des formes divergentes rivalisent pour servir de modèles à l'analogie: d'une part la série bals, chacals, régals, d'autre part la série bateau, chapeau, seau, ce qui entraîne des formes comme les animaux, un animau, et ralentit l'élimination des vestiges de l'alternance -al, -aux, si bien que Pierre Guiraud peut noter dans le Français populaire (pp. 17, 18) que ce type de pluriel "est bien intégré dans le système et (qu')on relève rarement des fautes à ce niveau".

Ainsi les formes du pluriel en -als pour -aux que l'on trouve dans les parlers franco-acadiens aussi bien du Nouveau-Brunswick que de la Nouvelle-Ecosse, aussi bien du siècle dernier que d'aujourd'hui, ne paraissent pas devoir leur origine aux parlers régionaux de la France de l'Ouest ni au français populaire de la région parisienne. Elles semblent plutôt une survivance du français préclassique. Vigoureusement combattues outre Atlantique, remarquablement stables ici, elles tendent à s'introduire dans le français d'Acadie, et l'on peut se demander si elles ne deviendront pas une "usage"./.

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³ Animau, forme mentionnée par Phil Comeau ("Le Dialecte "Acadjonne" des Acadiens de la Baie Sainte-Marie" (N.-E.)). Selon Kr. Nyrop (*op.cit.*, p. 209, parag. 291), animau n'apparaît de nos jours, au singulier, que dans les patois. Dauzat (*Précis d'Histoire de la Langue et du Vocabulaire*, p. 97) y voit un "ruralisme en voie de disparition" plutôt qu'un cas de français avancé.

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A Syntagmatic Characterization of the Segmental Phonemes
of the Southeast Asian Languages Compared with Chinese.

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In this paper we shall construct a syntagmatic characterization of the segmental phonemes of the following languages: Vietnamese, Thai, Laotian, Cambodian and Chinese. The Vietnamese data is based on the northern dialect, Thai on Bangkok standard, Laotian on Vientiane standard, Cambodian on Pnom Penh standard, and Chinese on Peking standard.

The comparison of the distributional characteristics of the segmental phonemes is conducted within the bounds of the syllable. By the structure of the syllable we mean formulas consisting of series of classes of phonemes. The syllable is described with respect to the features vocalic (V) and consonantal (C). A syllable-forming vowel V is an obligatory element of the syllable and may take part in following series in combination with facultative non-syllabic elements in initial or final position. We are assuming that the structure of the syllable within the Southeast Asian languages may be adequately described with a four-part system: the first position in the syllable may be filled by an initial consonant C_I ; the second position may be filled by a non-syllabic consonant $C_{II}(\hat{V})$; the third position is the syllable nucleus, which may consist of any of the following: 1) a simple nucleus V_1 , a syllable-forming short vowel; 2) a geminated nucleus V_1V_1 , a syllable-forming long vowel; or 3) a disegmental nucleus with different elements V_1V_2 , a phonological diphthong; the fourth position is a final consonant $C_{IV}(\hat{V})$. It is possible to propose two solutions: the first with the glides /w/ and /y/ interpreted as consonants /w/ and /y/, the second with these phonemes interpreted as non-syllabic vowels /u/ and /i/. In this paper we will provide the first solution; the second may be obtained by mechanical substitution. In languages having a tonal system the toneme serves as a supersegmental phoneme.

The distribution of phonemes within the syllable in the examined languages is subject to strict limitations. Only

certain elements of the phonological system in a particular position within the syllable are allowed, and if identical phonological units happen to be used in various portions of the syllable, then each of them may be attributed with specific characteristics which will permit them to be viewed as positional variants of one and the same phoneme.

As an aid to the following discussion we provide in table 1 a list of the consonants and vowels of the examined languages.

FIRST POSITION (+C_I -C_{II})

The presence of a consonant as the initial element is common to the languages under discussion. Should the consonant be absent, the syllable begins with a glottal stop which in this case is not considered a segmental phoneme. We analyze the elements of the syllable permitted in first position when the second position is unfilled (see table 2).

In Vietnamese from the general set of 25 phonemes the phonemes /p/, /w/, and /y/ are not attested in this position.³ All 20 phonemes of Thai and 19 of Laotian are found in first position. In Cambodian 3 of 19 do not occur: /f/, /w/ and /ʔ/, but /f/ is encountered in borrowed words.⁴ In Chinese 4 of 22 are lacking: /w/, /y/, /yw/, and /ŋ/.

FIRST AND SECOND POSITIONS SIMULTANEOUSLY FILLED (+C_I +C_{II})
(Tables 3 and 4)

In Vietnamese 15 of 25 phonemes occupy the first position,⁵ while the second permits the glide /w/.⁶ In Thai 6 of 20 phonemes occur in first position while in second position 3 are possible: /w/, /r/, and /l/.⁷ In addition in rare cases /d/, /f/, and /s/ occur in first position and /y/ in the second. In Laotian 9 of 19 phonemes are possible in first position while in the second as in Vietnamese only⁸ /w/ occurs. The most complex system is found in Cambodian. In the first position 7 of 19 elements are possible, while in the second 17 of 19 occur. In the first position in Chinese⁹ 18 of 22 phonemes are possible, with 3 allowed in the second: /w/, /yw/, and /y/.

On the basis of this information we may draw the following conclusions: 1) Thai, Laotian and Cambodian are the most closely-related languages according to the number of elements

(6-9-7) encountered in the first position. 2) In Vietnamese and Chinese the number of elements permitted in the first position is significantly greater than in the remaining languages. 3) Vietnamese and Laotian coincide in the quality and quantity of elements permitted in the second position. 4) Cambodian differs sharply from the remaining four languages.

THIRD POSITION (SYLLABLE NUCLEUS) (Tables 5, 6, 7, and 8)

The Simple Nucleus. Here the syllable-forming vowel is followed by an obligatory final consonant; in Thai, Laotian and Cambodian if this final consonant is absent the syllable-forming vowel is followed by a glottal stop /ʔ/, which in the given circumstances is not a phoneme. This is not characteristic of Vietnamese.¹⁰ Chinese differs from all the examined languages in that, having no phonemic length, it lacks simple nuclei (see table 5).

Thai, Laotian and Cambodian coincide completely in the number and quality of their simple nuclei, while Vietnamese is distinguished from them by the presence of two simple nuclei with the syllable-forming vowels /ə/ and /a/.¹¹

The Complex Nucleus may be in an open syllable, but it may also be followed by a final consonant.

The Geminated Nuclei (table 6) in Vietnamese, Thai and Laotian coincide completely in number and quality. Cambodian adheres to them by coinciding with them in 9 nuclei, but it contains 4 more for a total of 13. 4 nuclei of Chinese coincide in quality with the remaining languages, but one nucleus is not present in the Southeast Asian languages: /ü/. It should be noted that in Chinese itself the functional load of the phoneme /ü/ in comparison with other vowel phonemes is not very great; /ü/ is encountered in the smallest number of syllables.¹² Thus the Southeast Asian languages are opposed in many features to Chinese.

The Complex Disegmental Nucleus (table 7). In Vietnamese, Thai and Laotian 3 nuclei, /i/, /w/, and /u/ may be observed. Cambodian differs sharply from these languages by having 8 nuclei; however, 3 of them are identical to those in the remaining Southeast Asian languages. Chinese stands apart from the Southeast Asian languages in that it does not permit disegmental nuclei at all. In fact, if the syllable-forming

vowel in Chinese is taken as a monosegmental nucleus, then Chinese is characterized by the presence of 5 simple nuclei, and the total absence of complex nuclei.

In table 8 the relationships between the first and second portions of the complex dissegmental nucleus are set out. Vietnamese, Thai and Laotian coincide completely in both positions, having the same quality and quantity (3 and 1) of vowels. Cambodian has the same set plus additional possible vowels in both positions.

FOURTH POSITION (SYLLABLE-FINAL ELEMENTS) (Table 9)

In the Southeast Asian languages the following elements may be used as syllable-final elements: the implosive stops /p/, /t/, /k/, the glides /w/ and /y/, and the nasals /m/, /n/, and /ŋ/. In Thai, Laotian and Cambodian a glottal stop /ʔ/ may occur, if the syllable-forming element is a short vowel and there is no other final element. In Vietnamese a syllable consisting of a short vowel plus a glottal stop is impossible. In Chinese since length is not phonemic in vowel phonemes, in an open syllable it is possible to have a syllable-forming vowel without a following glottal stop, just as it is possible in the remaining languages when the syllable-forming element is a long vowel.

In Vietnamese in addition to the stops and nasal indicated there is also a palatal stop /c/ and a nasal /ɲ/, which can be viewed as positional variants of the velar phonemes /k/ and /ŋ/ in the position following short front vowels.¹³ Thai and Laotian coincide completely in both quantity and quality with respect to the implosive stops /p/, /t/, /k/, glides /w/ and /y/, and nasals /m/, /n/, and /ŋ/. Accepting the above analysis of Vietnamese, we may attribute it to the same group as an intermediate stage between Thai and Laotian on the one hand and Cambodian on the other. In Cambodian in addition to implosive stops /p/, /t/, /c/, /k/, the last of which has a glottal stop /ʔ/ as a positional variant, nasals /m/, /n/, /ɲ/, /ŋ/, and glides /w/ and /y/, we have also the spirant /h/, which is replaced by the consonant /s/ as a variant in slow speech, and a liquid /l/, which has the variant /r/ in western dialects.¹⁴

Once again Chinese stands apart from the Southeast Asian languages in that within the contemporary language implosive stops are not used as final elements. Besides the nasals /n/, /ŋ/ and glides /w/ and /y/, which are common to all the languages, Chinese also has the phoneme /r/.¹⁵

Thus Chinese has the minimal number of final elements (5), while Cambodian has the maximal number (12). Vietnamese, Thai, and Laotian may thus be seen to form intermediate stages between Chinese and Cambodian. All of the languages coincide in allowing the glides /w/ and /y/ in final position.

CONCLUSIONS

On the basis of the above analyses, it may be concluded that the synchronic analysis of the syllable structure of the Southeast Asian languages provides evidence for considering them as a group in opposition to Chinese. Within this group, Vietnamese, Thai, and Laotian form a subgroup in opposition to Cambodian, and serving as intermediate stages between Cambodian and Chinese. The smallest subgroup consists of Thai and Laotian.

This confirms the conclusions reached in my earlier article, not only on the phonological level, but on the morphological level as well.¹⁶

NOTES

¹The following abbreviations are used: V - Vietnamese, T - Thai, L - Laotian, C - Cambodian, and Ch - Chinese.

²See the supplementary literature: a) for Southeast Asian languages: Glazova 1978, b) for Chinese: Dragunov and Dragunova 1955, Gal'cev 1962, Hartman 1944, Ivanov and Polivanov 1930, Moskalev 1963, Moskalev 1964, Polivanov 1928.

³The phoneme /p/ is encountered in borrowed words and /y/ is found in the southern dialect. See Thompson 1959:460.

⁴Gorgoniev 1961:29.

⁵The phoneme /ʀ/ is attested in the southern dialect in this position. See Thompson 1959:458, 466, 470.

⁶In the southern dialect the glide /y/ is also possible in this position. In the second position of the syllable in central and southern dialects the liquids /l/ and /r/ are encountered, forming the consonant clusters /tl/, /tr/, /bl/ which were characteristic of medieval Vietnamese. See Thompson 1959:452, 466, 470; Maspero 1912:76.

⁷Noss 1964:14. The combinability of elements of the first and second positions is subject to limitations.

- ⁸Martini 1946:125-130; Gorgoniev 1961:34. The combinability of elements is subject to limitations.
- ⁹Dragunov and Dragunova 1955:75; Hartman 1944:32.
- ¹⁰Haudricourt 1952a:264; Haudricourt 1954:80-82.
- ¹¹Haudricourt 1952b:90-93. Haudricourt distinguishes in Vietnamese 6 pairs of vowel phonemes opposed according to their length: /ě - e/, /ě̄ - ε/, /ě̄̄ - ə/, /ǎ̄ - a/, /ǎ̄̄ - o/, /ǎ̄̄̄ - o/. He thinks that the palatal final consonants /c/ and /ɲ/ are variants of the velar final consonants /k/ and /ŋ/ in the position following a short front vowel.
- ¹²Gal'cev 1962:216.
- ¹³Haudricourt 1952b:90-93; Gordina 1960:69, 86, 125, 134-140. It should be noted that in the Muong language the final liquids /l/ and /r/ do exist. It is possible that this reflects an earlier stage of Vietnamese. See Maspero 1952:583. Haudricourt believes that in ancient Vietnamese there was also a final /s/, which later became /h/, and a glottal stop /ʔ/; both of these were later lost, in compensation for which phonemic tones developed. See Haudricourt 1952a: 264-265.
- ¹⁴Gorgoniev 1961:31. In Cambodian in final position the graphic representation of /r/ occurs, which, however, is not pronounced. This may be taken as evidence that /r/ was at one time used in final position in Cambodian.
- ¹⁵Gal'cev 1962:112. In ancient and medieval Chinese the final implosive stops /p/, /t/, /k/ were used and are preserved in Chinese dialects. See Polivanov 1928:88.
- ¹⁶Glazova 1966, 1967, 1970, 1978.

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TABLE 1

V	p t c k	t' b d	ç	f s ʃ x h v	z z' ž ʒ	m n ŋ ŋ l	w y	25					
T	p t c k	p' t' k' b d	ç	f s h v		m n ŋ l r w	y	20					
L	p t c k	p' t' k' b d		f s h		m n ŋ ŋ l	w y	19					
C	p t c k	b d		f s h v		m n ŋ ŋ l r w	y	19					
Ch	p t	k p' t' k'	ts tʃ ts' tʃ'	f s ʃ x		m n ŋ l r w y w y		22					
V	i	ɯ	u	e	ə	o	ɛ	ɔ	a	ia	wa	ue	14
T	i i	ɯ ɯ	u u	ě e	ə ə	o o	ě e	ɔ ɔ	ä ä	ia	wa	ue	21
L	i i	ɯ ɯ	u u	ě e	ə ə	o o	ě e	ɔ ɔ	ä ä	ia	wa	ue	21
C	i	ɯ ɯ	u u	e	ə ə	o o	ɛ	ɔ ɔ	ä ä	ia	wa	ue	28
Ch	i i	u		ə		a							5

TABLE 2

V	- t c k	t'	b d	ɛ	f s ʃ x h v
T	p t c k	p' t' k'	b d		ɛ f s h
L	p t c k	p' t' k'	b d		f s h
C	p t c k -		b d		- s h v
Ch	p t k	p' t' k'		ts tʃ tʰ tʃʰ	f s ʃ x

TABLE 3

V	t c k	t'	d	ɛ	s ʃ x h
T	p t k	p' t' k'			
L	c k	t' k'			s h
C	p t c k				s
Ch	p t k	p' t' k'		ts tʃ tʰ tʃʰ	f s ʃ x

z z z	r	m n p y l	--	22
		m n y l r	w y	20
		m n p y l	w y	19
		m n p y l r	- y	16
		m n l r		18

z		n p y l		15
				6
		n y l		9
	m	l		7
	m n	l r		18

TABLE 4

V		w	l
T		rw	3
L		w	l
C	p t c k ʔ b d s h v m n ʝ y l r		y 17
Ch		w yw	y 3

TABLE 5

V		əɔ	2
T	i e ε w	u o o	9
L	i e ε w	u o o	9
C	i e ε w	əɔ u o o	9
Ch		o	0

TABLE 6

V	ii	ee	εε	ww	əə	aa	uu	oo	ɔɔ	g	
T	ii	ee	εε	ww	əə	aa	uu	oo	ɔɔ	g	
L	ii	ee	εε	ww	əə	aa	uu	oo	ɔɔ	g	
C	ii	ee	εε	wwəə	əə	aa	uu	əə	oo	aa	ɔɔ
Ch	ii	i'i			əə	aa	uu			5	

TABLE 7

V	ia	wa	ua	3			
T	ia	wa	ua	3			
L	ia	wa	ua	3			
C	ia	wa	εə	ɔə	ao	aɔ	8
Ch				0			

TABLE 8

V_1		V_2	
V	i w u	v	ə
T	i w u	t	ə
L	i w u	l	ə
C	i w u ε ɛ a ɔ	c	ə e o ə
Ch		Ch	0

TABLE 9

V	t (c)	k (k ^o)	m n (ŋ)	ŋ (y ^o)	w/ɥ	y/ɨ	8 (12)
T	t	k	m n	ŋ	w/ɥ	y/ɨ	8
L	t	k	m n	ŋ	w/ɥ	y/ɨ	8
C	t c k	h	m n ɲ	ŋ	f w/ɥ	y/ɨ	8
Ch			n	ɲ	r w/ɥ	y/ɨ	5

Saussure's Game of Chess

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When Saussure introduces his famous analogy of the game of chess, as on pages 43 and 125 of the Cours de linguistique générale (CLG), it is always to illustrate one particular point: that a language is a system. He says clearly on p. 43, for example, when introducing his analogy, "la langue est un système qui ne connaît que son ordre propre." He goes on to point out that certain aspects of the game of chess are irrelevant to the internal system of the game: the fact that chess travelled from Persia to Europe is irrelevant to the system, being an external fact. And, he says, one can change ivory pieces for wooden pieces without affecting the game: a thought that he will pick up again on p. 169 with a comment that has mystified many, but which I hope to clarify today: "La langue est une forme, non une substance." The system does not lie in the substance.

This is not a new idea in the posthumous Cours. The germ of it was already in the famous Mémoire sur les voyelles, written and published in 1879 while Saussure was still a graduate student at Leipzig. We have so little from the pen of Saussure that it is extraordinary that this extensive treatise (which is the definitive nineteenth century work on the PIE vocalic system) should have been produced before his doctoral thesis and at a time when Brugmann, Osthoff and others were already great names, and in the process of establishing their independence. In the Mémoire, for example, Saussure demonstrates, on the basis of the systematic evidence of the IE languages, the necessity of reconstructing what today we call the laryngeals. As a result the laryngeals have been accepted, on purely formal evidence, as part of the vowel system of Proto Indo-European. But linguists still argue about the phonetic nature, the substance, of the laryngeals. La langue est une forme, non une substance: as a result, one can, in historical linguistics, reconstruct vowels as contrastive elements of a phonological system on purely formal evidence, even if one is unable to determine their phonetic nature or substance.

We may also find that for a given phonological system different phonetic realizations may be possible.

We are well aware, for example, that the diphthongs /ay/ and /aw/ of Standard English may be pronounced in different ways while still remaining the same essential contrastive elements within the phonological system of English. The speaker of Standard English quickly recognizes the pronunciations of /ay/ and /aw/ or /əy/ and /əw/ as being the same as his /ay/ and /aw/, which is why, of course, after a little initial confusion, speakers from different regions soon come to understand each other completely: they use the same system, for all the differences of substance. La langue est une forme, non une substance...

It follows from this that there is a primacy of form over substance in language, a primacy that must become a fundamental principle of the science of linguistics. Hjelmslev notes, in fact (Prolegomena p. 50): "If we maintain Saussure's terminology--and precisely from his assumptions--it becomes clear that the substance depends on the form to such a degree that it lives exclusively by its favor and can in no sense be said to have independent existence." One gets the impression, however, that Hjelmslev sometimes goes too far, and fails to see the important role that substance unquestionably plays; consequently he tends to treat language as an abstract algebra. It is significant, for example, that when Hjelmslev (Essais linguistiques 28) takes up the analogy of the game of chess, instead of replacing wooden pieces by ivory, he is prepared to replace a piece by "any conceivable object of a convenient size." He fails to note, however, that if all the pieces were replaced in such a way the game would be reduced to chaos for ordinary mortals, because there would be no more distinctiveness on the level of perceivability. Whereas form is the fundamental aspect of conceivability, substance is the fundamental aspect of perceivability: it is through the substance that the form is perceived. Consequently, even if there is a priority to be given to form, the interdependence of the two aspects is ineluctable, and one cannot simply abstract or ignore the aspect of substance, and, in fact, the significant role that it plays must be taken fully into account. To give Hjelmslev his due, however, one must admit that he is one of the few linguists who have understood completely what Saussure meant by forme.

One may, moreover, as Hjelmslev indicates, replace one of the chess players (if lost, for example) with some mundane object such as a small bottle or a spice jar. The spice jar then becomes, among the regular chess pieces, a suppletive element, and an excellent analogy for a suppletive morph in an otherwise regular morphology.

The analogy, however, immediately raises fundamental questions for linguistic method, since it indicates that this suppletive morph is an element of substance, not an element of form, since the chess players represent substance and the form--the rules of the game and the movements of the pieces--is not in anyway affected or altered by the introduction of this suppletive element.

This is not the notion of form that we are accustomed to in normal linguistic usage, where we tend to use the term form for morphological elements; indeed the Greek root in morph and morphology means "shape" or "form". But Hjelmslev, interestingly enough, does not use the term form in this way: instead he distinguishes expression (which includes the morphology and relates to the Saussurian signifiant) from content (which includes meaning and relates to the Saussurian signifié). In what follows, these terms of Hjelmslev will be utilized: content for the meaning, and expression for the morphosyntax that presents that meaning to the hearer. Expression is thus, like the chessmen, the element of perceivability that makes the content observable to the person who knows the language.

It is clear that Jakobson too follows this basic insight of Hjelmslev. In the famous Kaususlehre of 1936 Jakobson is attempting to delineate the content system of the Russian noun, which relates to the paradigm of case in the expression system. He praises Hjelmslev's work La Catégorie des cas, which had appeared the year before in 1935, especially pp. 85ff where Hjelmslev is at pains to make clear that a grammatical system is a content system--a set of meanings, un système de valeurs in Saussurean terms.

It is quite extraordinary that Hjelmslev finds this view in a work that was published in 1827: Die

Bedeutung der Sprachlichen Casus und Modi by Franz Wüllner. Hjelmslev (1935:37) quotes the principles that Wüllner enunciates, one of which is as follows: "La conception ou l'idée qu'il s'agit de chercher dans une forme linguistique doit être une idée, une seule signification fondamentale (Grundebedeutung) d'un degré d'abstraction assez grand pour permettre d'en déduire tous les emplois concrets de la forme."

The same idea is to be found in Gustave Guillaume who uses the term signifié de puissance for the underlying unitary meaning (which Jakobson calls Gesamtbedeutung) from which all the surface meanings or signifiés d'effets are drawn, just as a range of allophones may be drawn from a single underlying phoneme.

Guillaume goes even further and promotes at several points in the four published volumes of his posthumous Leçons de linguistique his two laws, the Law of Coherence, which says that the coherence of a linguistic system lies in the realm of content, in the content system, and the Law of Simple Sufficiency, which says that the related expression system or paradigm is not necessarily totally coherent; it need only be sufficiently coherent to express the content. For example, most noun plurals in English are marked by a regular morphology. But there are as well a score of irregular plurals such as mice, men, teeth. The plural forms of these nouns nevertheless convey the same grammatical meaning as the regular plural: mice is notionally the same kind of plural as is the plural in cats, dogs, and horses. The notional contrast in the grammatical system is coherent, even when the observable morphology, the elements of the expression system, fail to be coherent. In like fashion we are aware that such verbal forms as talked, sang and went are the normal past tense forms of the verbs talk, sing and go, the first regular, the second irregular, and the last suppletive. In fact, if we did not know that went represents the combined meaning of the lexical element go and the grammatical meaning of past tense, we would be quite unable to relate the two forms go and went together. It is the coherence in the content system that enables us to relate these two elements of the paradigm to each other.

Guillaume does not seem to be aware of the work of Hjelmslev and Jakobson, and of the fact that their view is identical to his. In fact, in the most recent of the four volumes (Guillaume 1974) he indicates that his discovery of his two laws dates from about 1947, well over a decade after the work of Jakobson and Hjelmslev on case systems. At the same time (lesson of 23 March 1950) he comments that similar ideas often occur to different scholars at the same time and tells an anecdote of a meeting of the Société de Linguistique de Paris that took place on 18 December 1948. At that meeting Aurélien Sauvageot delivered a paper entitled Structure et Système, of which the main conclusion was that language is far from systematic, on the evidence of the anomalies and dissymmetries to be found in the morphology. The only dissenting voice to this view was that of Michel Lejeune: "M. Lejeune a fait remarquer avec justesse que, d'après les exemples mêmes produits par M. Sauvageot, le problème de la systématisation serait celui de l'adaptation--nous disons ici de l'ajustement--du signifiant au signifié. Et il a posé expressément la question qui domine tout, la vraie question perdue généralement de vue: le système serait-il, est-il le signifié? M. Michel Lejeune--grâce lui soit rendue pour cela--a donc posé la question majeure."

In support of Michel Lejeune's intervention we may note a consistent feature of child language: the analogical reshaping of paradigms to make them as regular as the content systems they represent: what Lejeune called the adaptation, and Guillaume the adjustment, of the signifiant, the element of expression, to the signifié, the element of content.

The rest of the audience on that occasion seems to have been guilty of one of the more remarkable errors of structuralism as we have known it in linguistics: the insistence on treating the expression side of language as the fundamental linguistic reality (simply because it is empirical, directly observable) and ignoring the content side of language because it is only indirectly observable. It follows that structuralists of this kind endeavoured to find the structure of language in the expression system, a curious endeavour which may be likened to the attempt to delineate the movements of a pawn on the chess

board by describing the shape of the pawn itself.

Nowhere is the futility of this enterprise better seen than in the morphological analysis of the Post-Bloomfieldians. In Bernard Bloch's article on English Verb Inflection (Lg 23:399-418), for example, he analyses took as an alternant of take with a zero inflection: i.e. it is the same morpheme as take, with zero inflection for past tense. Nida's comment on this is refreshing: he writes (Lg 24:415): "...it appears to me as strikingly contradictory to treat overt distinctions as meaningless and covert distinctions as meaningful." Bloch, of course, is aware that since the paradigm take/took corresponds exactly to such regular paradigms as wait/waited, it is obvious that took and waited have something fundamental in common; his mistake is to conclude that this common element must be morphological since in his view the language system must be the directly observable morphology. And it is typical of this style of die-hard empiricism that, because it is essentially unworkable, since it ignores a large part of the total phenomenon, it results in the creation of phantoms, in this case a phantom suffix. What irony of fate that the attempt to be empirical fosters an indulgence for the unreal!

Once one accepts that what waited and took have in common is simply a meaning, or better a convergence of a lexical meaning and a grammatical meaning that is marked by suffixing in one case and by a portmanteau morph in the other, the morphological problems that haunted Bloch, Hockett and others in the 1940's turn out not to be linguistic problems at all, but problems created by imposing either a metaphysical view, or a methodological approach, on the language data and trying to force the data to make it fit this view or this approach.

Confusions over the questions of form and system in language continue to be a major problem in the discipline of linguistics. Hockett, for example, in criticizing Chomsky's view that syntax is well defined, comments (1967:936): "...the search for an exact determinate formal system with which a language can be precisely categorized is a wild goose chase, because a language neither is nor reflects any such system. A language is not, as Saussure thought, a system 'où

tout se tient.' Rather the apt phrase is Sapir's 'all grammars leak.'" Here we find, apart from the obvious misquote, at least two levels of confusion. We can overlook the fact that it was not Saussure, but Meillet, who spoke of "un système où tout se tient." But we cannot overlook the fact that the phrase "formal system" as used by Hockett may be intended to designate either a morphological system, as in the Post-Bloomfieldian sense, or a syntactic system, as in the Transformationalist sense. Neither of these designations would correspond to the Saussurean sense of the word system as I have tried to outline it in this paper. In fact the Saussurean, while insisting that a language is a system of systems, and thereby disagreeing totally with Hockett's underlying premise, might nevertheless well agree with Hockett that neither morphology nor syntax is either determinate or well-defined. We have already seen from Guillaume's two laws that it is the Law of Simple Sufficiency that applies to morphology, that the true system marked by the Law of Coherence is to be found not in the indeterminate expression system, but in the related content system.

Likewise, a Saussurean would almost inevitably agree with Hockett that the formalization of all the possible sentences of a language within a well-defined system is a "wild goose chase." First of all the "set of all possible sentences" is as much of a phantom as the missing suffix of the morph took, and stems from a similar empiricist bias--from the attempt to define a language as a set of sentences simply because sentences are directly observable. For Saussure the sentence belongs to parole, not to langue: "La phrase... appartient à la parole, non à la langue" (CLG 172). For Saussure the sentence is something that one makes individually, creatively and imaginatively by using one's language; it is "un acte individuel de volonté et d'intelligence" (CLG 30). Consequently there is nothing collective in parole: its manifestations are all individual and momentary, and Saussure concludes, as a result "...it serait chimérique de réunir sous un même point de vue la langue et la parole. Le tout global du langage est inconnaissable" (CLG 38). And if the empirical sentences of a language are unknowable, how much more so are all the possible sentences of a language.

By way of a final comment let us note that there are fundamental weaknesses in Saussure's analogy of the game of chess. Although, for example, one might expect the playing of the game to be an analogy for parole, that is, the use of the system, instead Saussure uses each move as an analogy for linguistic change, producing a different état de langue as the result of each move. This misses the point that although the situation on the board changes from move to move, the rules of the game and the basic potentialities of the individual pieces are not thereby changed. Nevertheless, the analogy is useful for an understanding of what Saussure meant when he insisted that a language is a system, and that a system owes its organization to form, not to substance. La langue est une forme, non une substance.

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Hypercorrection in Newfoundland French

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Newfoundland French is a local variety of Acadian spoken in the Port-au-Port/Stephenville area of western Newfoundland. A minority language variety spoken in a predominantly English geographical area where, until the last decade, there has been no education in French, Newfoundland French has been held in low esteem by its speakers and continues to be so held by many French Newfoundlanders and by the English of the area. It is not surprising, therefore, that we should find cases of hypercorrection, particularly in formal speech.

In this paper, three examples of hypercorrection will be discussed in the light of the linguistic and sociolinguistic factors which influence their occurrence. Hypercorrection is traditionally defined as the application of an improperly learned linguistic rule; an often-quoted example is the radio announcer's noon news [niun niuwz]. David Decamp has argued, however, that "we [must] know the social status of the speaker's dialect relative to the accepted standard of the community" (Decamp, 1972:87) before we can determine cases of hypercorrection. Hypercorrection of linguistic features is, therefore, dependent upon social phenomena. The effects of sociolinguistic variables such as age, education and prestige on the Newfoundland French data will be discussed below.

The data is taken from my own sociolinguistic study of clitic pronouns in Newfoundland French, which has a data base of approximately one hundred thirty hours of taped interviews for seventy speakers. However, since computerization of the results of this study has not yet been completed, only the speech of a small, selected number of informants will be considered here. No attempt will be made to compare this data with that of the larger study.

All examples to be mentioned concern clitic pronouns. P. H. Matthews defines clitics as "unaccented words which must lean for support...on a neighbouring full word in their construction." (Matthews, 1974:168). Clitics seem to be particularly problematical in the description of French grammar, where they are part of the Verb Phrase. In generative syntax, clitic pronouns are a subject of great debate. Much has been written on the origin of clitics, i.e. whether they are base positioned or moved by

transformational rules, on the constraints to be placed on such rules and on the special problems involved in describing the co-occurrence of object clitics. See for example Kayne 1975, Emonds 1976 and Morin 1979(a).

In sociolinguistics, I am aware of Cedergren and Sankoff's well-known work on /l/ deletion in Montreal French and Suzanne Laberge's work on indefinite pronoun usage in Montreal. My own study of Newfoundland French clitic pronouns is concerned with cliticization versus non-cliticization of Pro forms, as well as with phonological and morphological variation within the paradigm.

Since French personal clitic pronouns are similar but not grammatically equivalent to English personal pronouns (the latter are not clitics), it is not surprising that younger speakers of Newfoundland French who are also fluent speakers of English, as well as semi-speakers¹ of Newfoundland French who are much more fluent in English, had trouble with the Labovian structural elicitation section of the interviews. As one 25-year-old semi-speaker commented "When it comes to small parts like that, I can't say it," and "Those little ones really get to me."

The first example of hypercorrection occurred in the speech of a 76-year-old female. As in many dialects of Québécois², the predominant Newfoundland French form of the 3rd person singular is [i], the phonologically reduced equivalent of lui [lɥi]. In less formal speech this informant used [i], whereas in more formal speech she uses lui.

Less formal: j'i dis. [ʒi di]

More formal: je lui dis. [ʒe lɥi di]

(1)

The informant seems to be aware that [i] is a reduced form of lui. The reduction of lui → [i] seems to be a stylistic rule. However, by analogy with this rule, the informant has developed what I will call a symmetrical mirror-image rule (not to be confused with Langacker's use of the term), whereby the locative clitic [i] is interpreted as a reduced form of lui and is realized [lɥi] in formal speech.

Informant I

Less formal: I va là. [i va la]

More formal: Il y va. [il i va] (2)

Most formal: Il lui va. [il lui va]

In less formal speech there is no cliticization, the locative is rendered by an adverbial phrase. In more formal speech, older, more conservative speakers would have y, which the informant has interpreted as a reduced form of lui. Thus there is no morphological distinction between locative and lative clitics [i] and y, lui and lui. The informant has both a stylistic lui reduction rule, and a stylistic mirror image y → lui rule:

Rule 1 - Informal Speech

lui → i

(3)

Rule 2 - Hypercorrection; Formal Speech

y → lui

In view of this surface homophony, one might be tempted to hypothesize that dative and locative clitics have fallen together in Newfoundland and French. In Standard French locative y replaces à + NP prepositional phrases when the NP is inanimate and dative lui replaces à + NP prepositional phrases when the NP is animate as in the following examples:

Jean donne le livre à Marie. → Jean lui
donne le livre. (4)

Jean joue au tennis. → Jean y joue. (5)

It could be argued, then, that Newfoundland French has lost the animacy distinction and has just one clitic, lui replacing à + NP prepositional phrases which is reducible to [i].

However, this assumption is based on evidence from one speaker elicited in a formal context. It has been noted that in informal speech this informant, as well as other informants who are part of the larger study,

does not cliticize à + inanimate NPs at all, but does have dative clitics, thereby keeping dative and locative separate. Until statistical analyses of the data proves otherwise, we will assume that locative and dative clitics are distinct in terms of grammatical meaning and consider the above example as a case of hypercorrection.

The second example of hypercorrection concerns the syntactic position of clitics. Younger speakers and semi-speakers of Newfoundland French tend to use the clitic en as an enclitic in all constructions:

Standard French:

Il m'en donne. [il mǎ don]

Conservative Newfoundland French:

I m'en donne. [i mǎ don] (6)

Less Conservative Newfoundland French:

I me donne-z-en. [im donzǎ]

In Standard French, encliticization occurs only in the Affirmative Imperative Construction. Normally, in Newfoundland French encliticization also occurs in the Affirmative Imperative Construction:

Standard French: Donnez m'en!

(7)

Newfoundland French: Donnez moi-z-en!

The second informant is a 62-year-old male, who, like other conservative speakers, has en as a proclitic in non-Affirmative Imperative Constructions. However, in his formal speech, he has en as a proclitic in Affirmative Imperative Constructions as well:

Informant II

All styles: I m'en donne.

Informal speech: Donnez-moi-z-en! (8)

Formal speech: M'en donnez!

Thus the procliticization rule has been generalized to include all syntactic constructions in his formal speech.

In later discussions of the French spoken in his community, this informant expressed his dismay at what he considered to be bad French spoken by younger speakers. He cited as an example their use of en as an enclitic. He commented:

When they talks like that, the fullers up there, we laughs, us. I don't put the z-en on the end. That z-en don't go in French. It don't sound good.

He said that "good" French was spoken in the community in the earlier days of his father and his contemporaries who were born in France, many of whom could read and write French. He sadly concluded that the French of the younger generation is half English. His hypercorrection of procliticization seems to be an effort to conform to what he considers to be more prestigious French.

The third and final example of hypercorrection concerns the presence of /l/ in 3rd person subject pronouns in the speech of several older female and several younger male and female speakers. In Newfoundland French in general there seems to be a strong tendency for /l/ to delete before verbs and clitics³ beginning with consonants:

I dit la varité. [i di la varite]
I me dit la varité. [im di la varite] (9)
Il a dit la varité. [il a di la varite]

This latter group of speakers tend to adhere to this pattern in informal speech. However, in more formal speech /l/ is not deleted at all. Rather the subject clitics il (3rd person, masculine) and elle (3rd person, feminine singular) are often stressed and the regular intonation pattern of the phrase is altered:

Il dit la varité. [i[́]l di la varite]
Il me dit la varité. [i[́]l mə di la varite] (10)
Il a dit la varité. [i[́]l a di la varite]

In Standard French, clitics cannot be contrastively

stressed.

This example of hypercorrection involves the inhibition of the general /l/ deletion rule:

/l/ deletion

$$/l/ \rightarrow \text{zero}/_\# \left\{ \begin{array}{l} (\text{verb}) \\ (\text{C...}) \\ (\text{clitic}) \\ (\text{C...}) \end{array} \right\} \quad (11)$$

and the generalization of /l/ to all environments. This insistence upon the pronunciation of /l/ leads to distortion of the normal intonation and stress patterns.

It has been suggested that this contrastive stress may be an unfortunate result of the elicitation technique itself, rather than a consequence of hypercorrection. The formal speech section of the interviews consisted of the translation by the informants of a series of short sentences from English to French. The giving of short replies in an unnatural context may itself be responsible for the distortion of the informants' natural intonation pattern. It is necessary that spectrograms of structurally-elicited responses which contain third person clitics with /l/ be compared with spectrograms of responses where /l/ has been deleted, as well as with spectrograms of responses that contain first and second person clitics. If there is indeed a different stress pattern for only the third person examples with /l/ present, we would be justified in attributing the contrastive stress of hypercorrection. In any case, it is felt that the presence of /l/ in all environments, that is, inhibition of the /l/ deletion rule, is itself a case of hypercorrection.

The prestige dialect that this group of speakers strives to conform to differs according to the age of the speakers. The older female speakers, like the 62-year-old male mentioned earlier, consider "the real French" to be spoken by their parents and their contemporaries, many of them speakers of 19th century Normandy and Brittany French dialects. For younger speakers, who do not remember les vieux Français de

France, the "real French" is the Québécois they hear on television but don't completely understand, and written French they might have studied for a year or two in high school. Since presence or absence of /l/ is acoustically perceptible to the naïve speaker, inhibition of the /l/ deletion rule results from conscious efforts to assimilate linguistically to the prestige dialect. With the younger speakers who have studied some written French, orthographic -l- may also influence inhibition of the /l/ deletion rule.

It is noteworthy that metropolitan français populaire has an /l/ deletion rule as do North American French dialects.⁴ If illiterate speakers of Newfoundland French are emulating an external model, we can only assume at this point that application of the /l/ deletion rule is less frequent in these dialects than it appears to be in informal styles of Newfoundland French, where it seems to approach categorality.

We have seen, then, three examples of hypercorrection recorded in formal speech, involving instances of rule generalization, rule inhibition and an analogy--inspired mirror-image rule. With such a limited sample, it is difficult to draw conclusions as to the role of hypercorrection in linguistic change in Newfoundland French. That these examples of hypercorrection were recorded only in formal speech would tend to minimize their importance.

Since this paper is only a preliminary analysis of a small portion of my Newfoundland French data, it is impossible at this time to discuss the effects of sex as a sociolinguistic variable, as Trudgill did for his Norwich study (Trudgill, 1972). It is also impossible at this time to discuss hypercorrection in the Labovian sense, in which lower class informants surpass higher class informants in their usage of prestige markers (Labov, 1972:124-5), without analysis of the sample as a whole.

However, it is believed that the case of the inhibition of the /l/ deletion rule by younger speakers may become important linguistically, as Standard Québécois is more widely known and considered a model to be emulated. In only one of the three major communities where French is spoken are there adequate French

programs in the schools. It is here in Cap St. Georges that French would seem to stand the best chance of flourishing in the years to come. It is also here that Standard Québécois seems to be considered more and more the prestige dialect. Hypercorrection of /l/ may in the future prove to be part of more widespread changes in Newfoundland French towards this prestige model.

Footnotes

¹See Dorian 1976 for discussion of the role of the semi-speaker in language change and language death.

²See Vinet 1979.

³An exception appears to be the case in which the subject clitic is followed by an object clitic which itself begins with /l/. However, the data is too variable to be discussed before statistical analysis is completed.

⁴See for example Morin 1979(b).

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Foreign Names in Chinese

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The national language of China, which we call Mandarin and which the Chinese call Putonghua is historically and in linguistic origin the Peking dialect of Chinese. It is also referred to by linguists as Modern Standard Chinese (MSC) although the whole concept of a standard is much vaguer in Chinese than in most European languages.

The first problem concerning the rendering of foreign names into Chinese is the limited number of syllables available in the target language. According to the Peking Foreign Languages Institute (1979) there are approximately only four hundred syllables in Mandarin compared with a far vaster number in English for example. In addition, the structure of the syllables in MSC is itself very simple, certainly far more so than that of the syllables in the major European languages. To quote Kratchovil (1968: 24), 'The laws which govern the arrangement of consonants and vowels in MSC syllables can be summarized by the formula (C) V (C₁) in which each letter symbol represents a specific set of segmental phonemes and the round brackets denote non-obligatoriness of occurrence. Thus, four types of segmental arrangements occur in MSC syllables: CVC₁, CV, VC₁, and V. C stands for the non-obligatory initial consonant, V for the obligatory medial vowel (a simple vowel, a diphthong, or a triphthong) and C₁ for the non-obligatory final consonant'. The only final consonants possible are the nasals /n/ and /ŋ/ and in the initial position there are no consonant clusters apart from affricatives. It might be mentioned that in some other dialects final consonants other than nasals do occur. Thus in Cantonese there are /t/ /k/ /p/ as well as the nasals /n/ /ŋ/ and /m/.

Another major problem is that the written language is not phonetic¹. Each syllable is represented in the written form by one character corresponding to the meanings of the syllable. There are only four hundred or so syllables but this does not mean that there are only four hundred words or four hundred characters in Chinese. In the first place each syllable can potentially have four tones each with separate meanings. Thus the four hundred syllables have potentially one thousand six hundred distinct pronunciations,

though not all the syllables exist with four tones. Furthermore, each syllable with a given tone often has quite a large number of completely different meanings, represented in the written language in each case by a different character. Thus the word líng has at least fifteen meanings:

伶	actor, actress (old usage)
灵	clever, quick, sharp
圜	jail
瓠	water jar
凌	to insult, also a surname
铃	a bell
陵	a mound, hill, imperial tomb
羚	antelope
聆	to listen
菱	water chestnut
棧	(window) lattice
翎	tail feather
零	zero
龄	age, years
鲮鱼 (língyú)	a dace

Furthermore, it is usual to combine syllables to form new words. Consequently, in spite of the small number of syllables the vocabulary is as large as in any other language.

As far as foreign names are concerned the main problem posed by the written script is that it can only represent the four hundred syllables and new characters cannot be invented to represent sounds which do not exist in Chinese. With a phonetic alphabet it is possible to spell out the sounds approximately even if they do not exist in the target language. Moreover, all languages using the same phonetic script such as the European languages can retain the original spelling. Thus the French may write Monsieur Heath even if they may pronounce it as if it were a French word. If they know English they can also pronounce it as it is pronounced in the original language. This latter option is not available to the Chinese speaker, since not only is the pronunciation changed but also the written form. It is as if the French spelled all foreign names as pronounced according to their own phonetic system. e.g. Heath would be spelt Ite.

If the Chinese replaced the characters with a phonetic script² it might be possible to retain the foreign

name in its original spelling if the latter were in the roman alphabet. This would be preferable to respelling the name according to the Chinese phonetic system. Vietnamese provides an excellent example of what the Chinese could do since in Vietnamese which is a tonal monosyllabic language like Chinese the Chinese characters which were originally used were replaced by a phonetic alphabet by the French. Now foreign names retain their original spelling if they are from languages using the roman alphabet and they are pronounced closely enough to the original to be recognized, which is certainly not the case in Chinese. Moreover, the replacing of the characters in China with a phonetic script seems a long way off and all Chinese children are still learning to read and write the characters. Moreover, there are strong cultural reasons both for the retention of the characters, and for a sinecized pronunciation of foreign names, even if a phonetic alphabet were introduced. In addition, the present Chinese Phonetic Alphabet is different enough from the roman alphabet to make a Chinese pronunciation of names spelt as in the original quite difficult. It is true that many of the letters are the same as in the roman alphabet but the pronunciation is often different. This explains the problems faced in the west in pronouncing Chinese names spelled according to the Chinese Phonetic Alphabet. There are also linguistic reasons to suppose that the Chinese will probably never pronounce foreign names as, or closely as, in the original. Chinese non-speakers of English find it almost impossible to remember, let alone pronounce, English names unless sinecized.

A further problem is that Chinese has a large number of dialects which all use the same writing system. Just as in Europe the same Arabic numbers are used by all the language groups but are pronounced differently by each group, so the Chinese use the same characters but pronounce them according to their individual dialect. In China the policy is to transliterate names into Mandarin and there is a similarity between the foreign name and the Mandarin version. However, when the name is pronounced in a different dialect it may bear little or no resemblance to the original foreign form. The policy of transliterating only into Mandarin is followed to maintain one standard version in the written language and in the official national language. The problem of the dialects is not a minor one owing to the large number of speakers involved. Cantonese dialects are spoken by about 27,000,000 people, the Wu dialects by about 46,000,000,

Hakka dialects by about 20,000,000, Min dialects by about 22,000,000 and Hunanese dialects by about 26,000,000. Mandarin dialects are spoken by about 386,000,000 but are divided into four sub-groups (Kratchovil 1968: 16).

Alternatively foreign names could be transposed separately into each of the various dialects, but if this were done uniformly in the written version would be lost and confusion created. In Hong Kong where Cantonese is spoken a separate policy is followed and foreign names are transliterated directly into Cantonese. This may seem insignificant in view of the relatively small population of Hong Kong compared with that of China but it has a strong linguistic influence owing to its economic power and its highly developed mass media. Its newspapers and magazines are read by Overseas Chinese around the world.

An additional factor not yet considered is that each of the syllables (and written characters) used to transliterate a foreign name has a meaning (or meanings) of its own and the translator has to be careful not to choose characters with pejorative connotations. In China this problem has been resolved to some extent since a specific set of morphemes together with corresponding characters was chosen specifically for transliterating foreign expressions. However, even with this standard list there remains the problem of deciding which is the closest Chinese syllable or syllable for a given foreign syllable. In Hong Kong there seems to be no standard list of characters for transliterating foreign names though some characters are used more than others for this purpose. There seems to be little attempt to standardize the transliterations at all and two or more versions of a foreign name often exist at the same time, sometimes even in the same newspaper.

As to the actual method of rendering foreign names into Chinese, there are two basic approaches. It is possible on the one hand to translate the meaning of the name (if any) into Chinese and on the other hand to transliterate the name into the closest Chinese sounds using the standardized list mentioned above. A third method is to seek to combine the first two approaches and aim for a name which both sounds like the original and has the same meaning. Since this is nearly always impossible the next best solution is to find a version which sounds like the original and also has a pleasant meaning though not that of the original. Moreover, it is quite possible that the original name does not have a meaning at all while the Chinese version does.

An example of a name rendered into Chinese by translation of the meaning is the English city Oxford. In Chinese this becomes Niūjīn (牛津), literally 'ox ford'. Another more recent example is the Chinese translation of Watergate, Shuǐmén (水门). However, this is a relatively rare way of handling foreign names.

By far the most common method is that of breaking down the foreign name into Chinese syllables with approximate sounds. One only has to consult a Chinese atlas to find thousands of examples of such transliterations.

Thus Canada is rendered as

Jiānádà (加拿大)

and Ottawa as

Wòtāihuá (渥太华)

An example of a name containing a consonant cluster for which there is no equivalent in Mandarin is Bridgetown. (the sound /br/ does not exist in Chinese). This is transliterated as follows:

b	bù	(布)
ri	lǐ	(里)
dge	jī	(奇)
town	dùn	(顿)

Examples of names which have been transliterated into Chinese and have in addition been given favourable meanings are the countries England, France and Germany. In Chinese these are respectively:

Yīngguō
Fǎguō
Déguō

Yīng, Fǎ and Dé are transliterations of the first syllables of England, France and Deutschland and mean 'hero', 'law' and 'virtue', while guō means 'country'; hence 'the land of heroes', 'the land of the law', and 'the land of virtue'.

In general there is a strong temptation not to use the standardized list of characters in areas where

there is a need to influence people. The whole realm of advertising is one example. Foreign companies will make great efforts to insure that they have a name in Chinese which has favourable connotations. Coca Cola is just one company that put a lot of thought into the choice of its Chinese name:

kəkōukələ (可口可樂)

The Chinese version both sounds like the original and contains two characters not normally used to transliterate foreign words: 口 meaning 'mouth' and 樂 meaning 'happy'. This is the name Coca Cola uses in all Chinese-speaking areas whether the People's Republic of China, Taiwan, Hong Kong or other areas of South East Asia.

In Hong Kong, an advertisers' paradise, foreign names are often transliterated directly into Cantonese and a non-official, semi-standardized series of characters seems to have evolved for this purpose based not only on the sound as in the standard list used in China, but also on their favorable semantic value. The following characters, for example, are used very commonly:

寶	<u>bōu</u> ³	precious
金	<u>gām</u>	gold
嘉	<u>gā</u>	good
喜	<u>hēi</u>	pleasure
麗	<u>laih</u>	beautiful
樂	<u>lohk</u>	happy
美	<u>mēih</u>	beautiful
新	<u>sān</u>	new
華	<u>wāh</u>	Chinese

There is a profusion of names in Hong Kong transliterated into Chinese by means of these and similar characters but a few examples will suffice:

Connaught (a building) 康樂 , Hōng-lohk 'peace and happiness'

Gammon (a building) 金門 , Gām-mūhn 'golden gate'

Kingsburg 金寶 , Gām-bōu 'gold treasure'

Marlboro (a brand of cigarettes) 萬寶路, Maahn-bōu-louh
'the road to ten thousand treasures'

Maxim's (a restaurant chain) 美心 , Méih-sàm 'beautiful heart'

Pilot (a pen brand) 百樂 , Baak-lohk 'hundredfold happiness'

I found two examples of what was almost certainly the process in reverse and they are not unusual. The Cantonese name of a Chinese shop 四喜 , Sei-héi 'four pleasures', was rendered into English as Sea Hill. Another Chinese shop called 新麗 , San-làih 'new and beautiful' bore the English name Sun Ray.

Names from Japanese and Vietnamese pose particular problems since the Japanese themselves use Chinese characters, and the Vietnamese used Chinese characters in the past but now use a phonetic alphabet. In the case of names in Vietnamese it is necessary to rediscover the Chinese characters which were used originally, but there is a dictionary to help. As to Japanese names, two possibilities exist: pronouncing the Chinese characters in Chinese or transliterating the Japanese sounds into Chinese. Normally the first method is used which means that the Japanese and Chinese pronunciations of Japanese names are completely different. Luckily the phonetic script (kana) which the Japanese use together with the Chinese characters is not used for native Japanese names. In Hong Kong Japanese company names do not always retain the original Chinese characters but rather the sound is transliterated into Cantonese. This may well be to retain a similarity between the international name (also transliterated from the Japanese) and Cantonese. Thus Minolta is transliterated to Maahn-nàhng-daaht (萬能達). An additional problem for the Chinese mass media is that news from Japan often comes via western news agencies and it is necessary to discover what the original Chinese characters are for a name written in a romanized form. The Chinese have in fact produced a book giving the Chinese equivalents of romanized Japanese names.

I should like to mention briefly several other problems concerning foreign names in Chinese. Firstly, it is almost impossible to reconstruct the original name from the Chinese version. For this reason in certain printed texts the original name appears in brackets following the Chinese transliteration. However, this only occurs in material aimed at educated readers who are likely to know

a European language. It is not the general rule in Chinese mass circulation newspapers. Secondly, different foreign names may have the same Chinese version. For example, Lister and Liszt are both Līsītè (李斯特). Thirdly, there is no capitalization in Chinese and in written material it is not always clear except from the context whether the characters represent a foreign name. However, two or more characters in succession from the standard transliteration list usually indicate that such is the case. Sometimes transliterated names are underlined, as for example in the Chinese subtitles of foreign films but this is the exception rather than the rule. Fourthly, some characters have more than one pronunciation, which in theory could give rise to problems if they were used for transliteration purposes. A final problem is that the written characters may be written from left to right, right to left or vertically. Thus a shop in Hong Kong bears the English name Angela's Shop and the Chinese name 拉琪安, which reads from right to left as Àngīlā in Mandarin or On-kēih-lāai in Cantonese. (This is a fairly unusual example of a name in Hong Kong transliterated directly into Mandarin.) A Chinese non-speaker of English would have no way of knowing whether to read the name from the left or the right. In China the government has decided that writing should be from left to right and horizontal, but one can still see examples of right to left writing.

In the last part of this paper I deal briefly with some of the problems faced by the British Broadcasting Corporation's Chinese Service in London in translating foreign names into Chinese⁴. The BBC broadcasts to China in both Mandarin and Cantonese and the programmes are also relayed locally in Hong Kong. Normally the BBC follows the New China News Agency's version of foreign names but has to act independently in the case of new names, changing them if necessary at a later stage to conform with Peking's version. An example of a name which was changed was that used to transliterate Khomeini, the religious leader of Iran. The BBC's version 荷梅尼, Hēmēiní was later changed to 霍梅尼, Huōmēiní. The discrepancy here was probably caused by uncertainty as to the precise pronunciation of the name in the original language.

On several occasions the BBC has not followed Peking's lead. The most interesting and well-known example in recent years has been that of the transliteration of


Mr. Richard Nixon's surname. In China the official Mandarin version is Níkèsōng (尼克松). When this is pronounced in Cantonese the last syllable becomes chùhng which means not only 'pine' as in Mandarin but also 'worm'. The BBC in this case kept the same written version but deliberately mispronounced the last syllable in Cantonese. The BBC's version of Greenwich (as in Greenwich Mean Time) also differs from that used by the New China News Agency, since the official Chinese version Gélínwēizhì is based on a mispronunciation, the /w/ sound not existing in the English. The BBC's version is Gélínnízhì.

The BBC's policy concerning names in Cantonese is the same as that followed in China i.e. the written Mandarin version is used but pronounced in Cantonese. This is due to the fact that the majority of the listeners are in China, but it causes problems for listeners in Hong Kong where the custom is to transliterate names directly into Cantonese. Sometimes names are far removed from the original and complaints are received from time to time from Hong Kong listeners about this. One name which caused problems in Hong Kong was that of the South African politician, Mr. Vorster. The Mandarin version Wōsītè (沃斯特) became Yūk-sī-dahk in Cantonese. In spite of complaints the BBC did not change the name. Mandarin transliterations pronounced in Cantonese are, moreover, not only sometimes far removed from the original but they are sometimes longer and more unwieldy than a direct transliteration into Cantonese where it is possible to take advantage of the final consonants. Thus a foreign sound can sometimes be represented by one syllable in Cantonese whereas two are necessary in Mandarin.

To conclude, Chinese, compared to the major European languages or even Japanese, has largely avoided importing foreign words, preferring to draw on its own resources to create new words. The question of foreign names is particularly interesting since it is an area in which Chinese has been forced to make phonetic borrowings on a vast scale, a fact which has created new pressures in the language. Thus some written characters in some instances are now being used to represent sounds rather than meanings and one could almost describe as a sort of alphabet the four hundred or so characters chosen to represent foreign sounds. It is true that they are still used mainly to transliterate foreign names but the

temptation now exists to make direct phonetic imports of foreign words using these characters to represent them in a written form. Until now the written language has acted as a fairly effective barrier against the borrowing of foreign words but one wonders whether it will be as effective in the future. The creation of the Chinese Phonetic Alphabet is another crack in the system but it seems doubtful that it will replace the characters in the near future if indeed ever. If this were to happen the restraining influence of the characters would be lost and an increased use of foreign words would occur.

FOOTNOTES

1. Most Chinese characters do in fact have a phonetic element which may give some indication as to its pronunciation. In the list of characters on the second page of this article the  part of nine of the characters indicates the sound [ling]. The other part is the classifier and indicates the meaning.
2. The Chinese have created the Chinese Phonetic Alphabet and the long term aim of the government is to replace the characters with this alphabet. However, so far it is used mainly for signs, names of places, hotels, etc., in conjunction with the characters. It is also used in schools to help teach the Chinese language and is particularly useful in teaching the Mandarin dialect to speakers of other dialects. The alphabet is also used to spell Chinese names in languages using the roman alphabet. In this article Mandarin words are romanized according to the Chinese Phonetic Alphabet while Cantonese words are romanized according to the Yale system, there being no official Chinese romanization system for the dialect.
3. The transcriptions are in Cantonese, while the characters are the traditional versions still used in Hong Kong, as opposed to the simplified versions used in the People's Republic of China.
4. I should like to acknowledge the help of the BBC Chinese Service whose members spent over two hours discussing with me the question of foreign names in Chinese. In particular I should like to thank Mr. M.J. Harding, the Chinese Programme Organiser, who gave permission for the interviews, Mr. Derek Brooke-Wavell, the Senior Producer, Mr. Joseph H.T. Yen, and Mr. Joseph C.S. Jen who provided much of the information given here.

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Franco-American Language Features of Lewiston, Maine
studied in relation to Social Factors related to
Social Class and Years of Formal Training in French
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The data presented in this paper represent a small portion of the results obtained in a larger study dealing with the social aspects affecting the speech of the Franco-Americans of Lewiston, Maine. The data were gathered from 60 informants who were chosen randomly from a computerized numbered parish list. Each informant answered 30 questions dealing with personal information and provided 332 different items for the language study, as well as unstructured conversation which was used to verify any suspect form. All of the data gathering was done at the informants' homes in a relaxed atmosphere.

After transcribing the data, a computer programme was selected and codes were assigned to all speech variants. Frequency counts of the language features were first obtained followed by crosstabulations of social factors with language features. The results of crosstabulations between four social factors and selected language features will be presented here.

The social factors are: type of home, occupation, education, and years of formal training in French. The first three factors are listed by Lloyd Warner for the preparation of an index of social class. Of these factors, type of home showed the weakest correlation with the language features. The last factor, years of formal training in French, is included because one researcher had drawn conclusions about Franco-American speech based on broad categories related to an informant's training in French.

A review of previous work on Franco-American speech provided the starting point for this project. William Locke, Gérard Brault, Sister Maris Stella, Robert Fischer and Richard Martel had all studied various aspects of the phonetic system of Franco-American speech. The following list contains selected tendencies which they found in Franco-American speakers:

Chart 1.

1. Trilling of the r.
2. [ɛ] for [œ].
3. [ə] for [ɛ].
4. [ɪ, u, ʏ] for [i, u, y] when the vowels are not long in a closed syllable.
5. Assibilation of [t] and [d].
6. Diphthongization when the vowel is accented in the pre-consonantal position.
7. Metathesis.
8. Pronunciation of the [h].
9. Insertion of consonantal glides.
10. [ã] for [ã].
11. Elision.
12. Pronunciation of final stop consonants.
13. [ɸ] for [a] or [ɑ].
14. [ɛ] for [wa].

15. [wɛ] for [wa].
16. [e] for [ə] (in affirmative imperative structures with pronouns).
17. Dropping of the [ə].
18. [ɥ] for [j]. ([ɥ] represents a fronted [g])

In presenting a summary of the above features, at least one sample item will be discussed. It is important to note that several items were studied in order to reach the following conclusions:

1. The trilling of the r: The trilled r was rare in Lewiston. For example, only 4 informants pronounced rien [ʀjɛ̃].
2. [ɛ̃] for [œ̃]: [œ̃] pronounced [ɛ̃] also proved to be almost non-existent in Lewiston. Only 3 respondents used the form in the sample item quelqu'un [kɛ̃lkɛ̃].
3. [æ] for [ɛ]: The variant [æ] for [ɛ] is not typical of Lewistonian speech. Only 1 informant used [æ] in the expression par exprès [parɛkspræ].

These first three features said to be common of the Franco-American speech are not significant in Lewiston.

4. [ɪ, ʊ, ɣ] for [i, u, y]: The [ɪ, ʊ, ɣ] sounds resulting from the opening and centralizing of [i, u, y] of standard French are nearly always evident in Lewistonian speech when the vowels are not long in a closed syllable. Four items testing the [i] yielded similar results.

<u>Chart 2.</u>	No. of informants using	
	[ɪ]	[i]
huit	52	0
dentiste	46	4
aiguille	45	3
fille	49	2

Similar results occurred for the [ʊ, ɣ] versus the [u, y], and did not provide significant crosstabulations with the social factors.

5. Assibilation of [t] and [d]: Between 6 and 11 informants pronounced tuer and dimanche in the standard way. All the other informants assibilated the [t] and [d]. No correlation between social factors related to social class, years of formal training in French and this language feature were found.
6. Diphthongization: The word tête used to test the tendency to diphthongize when a vowel is accented in the preconsonantal position revealed the following: 46 of 52 informants used a diphthongized form of the word and there was no marked difference in the background of the informants. It appears, then, that this tendency is strong at all social levels in Lewiston, and at all levels of formal training in French.
7. Metathesis: The word cardboard, carton, was one item used to test metathesis. 10 informants used the standard form [kartɔ̃] and 36 informants used a form of metathesis. The 10 informants who used the standard form had the following

background: Home: only 4 of the 10 lived in privately-owned single homes. Occupation: 4 of the 10 using the standard form were professionals. Education: 1 informant with 17 or more years of education used the standard form, while informants with 6 to 8 years of education used it also. Nevertheless, on the whole, informants with 12 years or less of education tended to use metathesis more often than informants with more than 12 years of education. French Training: the use of the standard form versus the form with metathesis also seems to be related to years of formal training in French. Such is indicated by the following statistics:

Chart 3.

Years of formal training in Fr.	% not answering	% of informants using metathesis	% of informants using the standard form
13-14		60	40
12	10	50	40
9-11		80	20
7-8		71.5	21.4
4-6	20	80	0
0-3	50	50	0

8. Pronunciation of [h]: This characteristic is very strong in Lewiston. 39 respondents pronounced the [h] in the word hanche. However, when asked to translate some hips, only 27 respondents pronounced the [h]. 7 respondents used a form indicating hiatus, while 7 used a form with a glide. The [h] is unstable in Lewiston. Few respondents were aware of the standard pronunciation, and several seemed unsure of which pronunciation to use and altered it when the environment of word changed. The 7 respondents who used the form with hiatus had varied backgrounds.

The characteristics [U,I,Y] for [u,i,y], the assibilation of [t] and [d], the diphthongization of accented vowels in the pre-consonantal position, the occurrence of metathesis, and the pronunciation of the [h] are strong tendencies at all social levels in Lewiston. On the whole, these features did not correlate with the social factors related to social class. However, the use of a standard form as opposed to a metathesized form did correlate with the factor years of education and years of formal training in French.

It is possible to generalize at this point that those features which are either extremely rare or highly prevalent in Lewiston tend to have little or no association with factors related to social class and years of formal training in French.

9. Insertion of consonantal glide: Consonantal glides are inserted between vowels by analogy or to avoid hiatus. There appears to be no correlation between the factors type of home, occupation, and this language feature. However, all 7 respondents who used the consonantal glide in the words des hanches [dezãw] had 12

years or less of formal education, and when translating the words five blind men, [sɛʃzɔmavɑ̃<g] was the answer preferred by 32 informants. In this instance, 1 informant with 17 or more years of education pronounced the glide [z]. 3 informants with 14-16 years of education also used the glide. It appears, then, that education is not strongly related to this characteristic.

The factor years of formal training in French did correlate to a certain extent with this language feature. The informants with 13-14 years of formal training in French did not use the consonantal glide, while approximately 20% of the informants from the groups 12 years, 9-11 years and 7-8 years of French used the glide when pronouncing des hanches [dɛzɑ̃ʃ]. There seems to be a weak correlation between years of formal training in French and the use of the consonantal glide. This was corroborated by another item, five blind men, pronounced [sɛʃzɔmavɑ̃<g] where the following was observed:

Years of French	% of informants using cons. glide
13-14	40
12	50
9-11	40
7-8	64
4-6	80
1-3	75

10. [ã] for [ɑ̃]: The nasal [ã] remains more forward than its standard counterpart and is pronounced [ã], vent [vã]. Several items on the questionnaire yielded very similar results with this language feature. Between 13-18 informants used the [ɑ̃] form, while between 28-38 used the [ã] form:

	No. of informants using [ɑ̃]	No. of informants using [ã]
rang	13	28
cent	14	38

The pronunciation [ã] rather than [ɑ̃] is weakly related to social class factors. The highest and the lowest values on the social factors scale correlate with the use of [ɑ̃] or [ã], for example:

Years of Education	No. of informants using [rɑ̃]	No. of informants using [rã]
17+	3	0
6-8	2	8
3-5	0	3

Informants at the intermediate level do not necessarily follow this pattern, for example, informants with 15-16 years of education

display an opposite tendency: 1 informant [r^œ] and 3 informants [r^ā]. Similar data were obtained in all other items testing this feature. It would seem, therefore, that one may speak only of a partial correlation between this language feature and factors related to social class. Yet, there is a stronger correlation between the use of [œ] or [ā] and years of formal training in French. The word rang yielded the following:

Chart 7.

Years of French	% of informants using [œ]
0	50
1-3	50
4-6	60
7-8	78.6
9-11	60
12	30
13-14	20

The insertion of a consonantal glide and the use of the [œ] for [ā] are two characteristics of Lewistonian speech which seem to be only partially related to social class factors and years of formal training in French. As noted earlier, these features tend to correlate with some factors and not with others, and, furthermore, they correlate at times with only the poles of the scales.

11. Pronunciation of final stop consonants: The data provided by the item July/juillet [ʒyijɛt'] indicate that a stronger correlation exists between this feature and the factors related to social class and years of formal training in French. Type of home: 13 informants who owned their own homes used the form [ʒyijɛ] while only 2 used the form [ʒyijɛt']. 9 informants who rented apartments used the form [ʒyijɛ] while 8 used the form [ʒyijɛt']. Occupation: 13 professionals used the form [ʒyijɛ] while only 1 professional used the form [ʒyijɛt']. 3 mill workers used the form [ʒyijɛ] while 5 used the form [ʒyijɛt']. Education: this factor correlates at both ends of the scale with the pronunciation of the final consonant. Those with 17 years of education used the form [ʒyijɛ] while those with less than 5 years of education used the form [ʒyijɛt']. The mid ranges showed no consistent pattern. Years of formal training in French: all informants with 13 years of formal training in French used the form [ʒyijɛ] while the following percentages were observed for those with less training in French:

Chart 8.

Years of French	% of informants using [ʒyijɛt']	% of informants using [ʒyijɛ]
12	20	80
9-11	0	100
7-8	14.3	85.7
4-6	50	50
1-3	50	50
0	75	0

12. Elision: The Franco-American habit of eliding was tested in several items. The example elle a dit cela, yielded the following results:

Chart 9.

[aɾdzisɾ]	12 informants
[dzisɔ]	2 informants
[aladzisa]	4 informants

This language characteristic does not correlate with type of home, but it does correlate to a great degree with occupation and education.

Occupation: only 7.1% of the professionals used a form with elision, while 62.5% of the informants working in the shoe shops used such a form, and 58.3% of the informants who work in the mills used one of the elided forms.

Education: no informant with over 12 years of education used one of the elided forms, while 30% of those with 12 years and 50% of those with 9-11 years of education used such a form. The tendency to elide is thus related to two social class factors. Elision is also related to years of training in French as indicated in the following:

Chart 10.

Years of French	% of informants using elision
13-14	0
12	20
9-11	40
7-8	21.5
4-6	40
1-3	50
0	100

13. [ɾ] for [a] or [ɑ]: The item rate/rateau provided data for this characteristic. The following results were observed:

Type of home: There appears to be an inverse relationship between the use of [ɾ] and this social factor.

Chart 11.

Type of home	% of informants using [ɾɔ]
Single home	37.5
Owned apartment	41.7
Rented duplex	16.7
Rented apartment	35.3

Chart 12.

Occupation	% of informants using [ɾɔ]
Professional	7.1
Shoe shop worker	37.5
Mill worker	66.7
Other blue collar	42.7

Chart 13.

Education	% of informants using [rʔto]
Years of education	
17	0
15-16	0
13-14	25
12	20
9-11	58.3
6-8	50
3-5	33.3

Chart 14.

Years of formal training in French:	% of informants using [rʔto]
13-14	20
12	0
9-11	20
7-8	57.1
4-6	50
1-3	25
0	50

The use of [ʔ] rather than [a] or [ɑ] correlates with two of the three social class factors and with the informants' training in French.

14. [wa] changed to [ɛ]:

This phenomenon at the first level is an interesting example of an archaic pronunciation reverting to the sixteenth century. "Georges Gougenheim, [in his] Grammaire de la langue française du seizième siècle (Paris, 1951), pp. 23-24, notes two strong tendencies away from the normal pronunciation ([wɛ]) of words spelled oi in the sixteenth century: [wɛ] > [ɛ] and [wɛ] > [wa]. It is precisely the first of these two tendencies which has been preserved in the New England French pronunciation of words of the froid type at the first level" (Sister Maris Stella, French Review, p. 365). Fourteen informants used the form [frɛt'] for the word froid.

Type of home: Only 4 informants who owned their homes pronounced froid [frɛt'], while 12 of them used the form [frwɑ]. On the other hand, 6 informants who rented apartments used the form [frɛt'] and 8 of them pronounced froid [frwɑ].

Occupation: This language variable correlates to a stronger degree with occupation. All 13 professionals pronounced froid [frwɑ] while 11 of 22 blue collar workers used the form [frɛt'].

Education: Education has a stronger bearing on this language feature. The 11 informants with 12 years or more of education used the form [frwɑ]. The distribution of the pronunciation [frɛt'] was as follows:

Chart 15.

Years of Education	% of informants using [fret']
0	100
3-5	100
6-8	21.4
9-11	41.7
12	20

Formal training in French:

This social factor also correlates strongly with the language characteristic [wa] becoming [ε], as shown by the following statistics:

Chart 16.

Years of French	% of informants using [fret']
0	100
1-3	50
4-6	20
7-8	28.6
9-11	20
12	10
13-14	0

15. [wε] for [wa] before a sounded final consonant:

Two test items demonstrated a strong correlation between this language feature and factors related to social class and the factor years of formal training in French. The word thirst/soif was pronounced [swaf] 33 times and [swεf] 16 times.

Type of home: 75% of the respondents owning their homes used the form [swaf], while 47.1% of the respondents who rent an apartment pronounced [swaf].

Occupation: 78% of the professionals used the form [swaf], 50% who work in shoe shops used the form [swaf], and 33.3% of the mill workers used the form [swaf].

Education: All informants with more than 12 years of education used the form [swaf], except for one who did not answer. The following are the statistics for the other educational categories:

Chart 17.

Years of Education	% of informants using [wa]/[swaf]	% of informants using [wε]/[swεf]
12	60	40
9-11	66.7	33.3
6-8	42.9	42.9
3-5	33.3	66.7

Years of formal training in French: This factor showed a weak correlation with the item thirst/soif but the following statistics were found for the item star/étoile:

Chart 18.

Years of French	% of informants using [wa]/[etwa]	% of informants using [wɛ]/[etwɛl]
13-14	100	0
12	90	10
9-11	40	40
7-8	42	50
4-6	50	50
1-3	50	50
0	0	100

16. The use of [e] for [ə] in the article le in the affirmative imperative:

The item tell it/dis-le was used to test this characteristic. The following was discovered:

Type of home: There appears to be little correlation between this factor and the use of [e] or [ə].

Occupation: This factor correlates with [e] for [ə]. No professional chose the form [e] whereas a high percentage of blue collar workers did.

Chart 19.

Occupation	Pronunciation of dis-le/[dzile]
professional	0
large business owner	0
small business owner	50
shoe shop	37.5
mill	33.3
other blue collar	14.3

Education: all informants with 13 or more years of education used the form [lɛ] in the expression tell it/dis-le. Informants with 12 or fewer years of education used the form [le] in the following proportions:

Chart 20. Years of Education	% of informants using [le]
12	30
9-11	25
7-8	21
4-6	66
0	100

Years of formal training in French: There is a strong correlation between this factor and the use of [e] or [ə] in the pronoun le in the affirmative imperative. [e] is more typical among those with fewer years of French, [ə] among those with more years of French.

Chart 21.

Years of French	% of informants using [ə]	% of informants using [e]
13-14	60	0
12	60	10
9-11	60	20
7-8	42	21.4
4-6	30	30
1-3	25	75
0	0	0

The six characteristics detailed above, elision, pronunciation of final stop consonants, [p] for [a] or [a], [ɛ] for [wɑ], [wɛ] for [wa], and [e] for [ə] in affirmative imperative structures with pronouns, all demonstrate a strong relationship to the social class factors studied here and to the factor years of formal training in French.

In addition to the language features mentioned thus far, there are three characteristics significant with regard to Lewiston speech which did not correlate with the social class factors and years of training in French: [ə] versus dropping the [ə], [ɣ] for [j], and the pronunciation of a final [m'] or [b'] in words ending with mbre.

The following chart summarizes all selected language features in relation to the 4 social factors studied in this paper. (See p. 148.)

It is possible to conclude that certain language features found in other Franco-American communities are not significant in Lewiston, Maine. This suggests that perhaps each community has a certain number of specific language characteristics and that Franco-American speech is not uniform, as has been suggested by several scholars. In addition, we are able to speak of language characteristics which permeate the entire community regardless of an informant's social class or training in French. Finally, it has been discovered that some language features correlate with the 4 factors presented in this study. These isolated language features will be the object of new research in candid situations in order to provide more insight into the nature of the relationship which exists between them and the social factors.

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Language features:

<u>Rare in Lew.</u>	<u>Found at levels</u>	<u>With partial Correlation</u>	<u>With Strong Correlation</u>	<u>Significant with regard to Lewiston Speech/but no correlation</u>
[r] [ɛ̃] for [ẽ] [æ] for [ε]	-[i , u y] for [i , u y] when the vowels are not long in a closed syllable. -diph. of vowel when accented in the preconsonantal position -[h] -metathesis -assibilation of [t] and [d]	-metathesis -consonantal glide -[ǣ] for [ǧ]	-pronunciation of final cons. -[wɑ] vs. [wɛ] before a sounded final cons. -[ε] for [wɑ] -[v] for [a , ɑ] -elision -[e] for [ə] in affirmative imperative structures	-[ə] vs drop of [ə] -[<g] for [j]

The Central Belorussian "Stem-Stressed" Conjugation, and
Its Implications for a Theory of Language Change

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Since Saussure, virtually all linguists have worked with a homogeneous model of language structure in which the variation among linguistic variables encountered in everyday speech is dismissed as mere "code-switching", "dialect borrowing", or "errors of performance". Also dropped from consideration when discussing a synchronic linguistic state is anything connected with "external linguistics", including the social aspect of language and dialect geography. One finds in the literature many allegations to the effect that violating these precepts renders the scientific study of language impossible.¹ Thus doctrinaire structuralists and generativists generally regard language as a discrete, hermetically-sealed system, and the object of linguistics as "the ideal speaker/listener in a completely homogeneous speech community."²

Within this framework, the task of historical linguistics becomes the description of the relationship between two monoliths separated from one another in time. More precisely, the goal is to describe ". . . the actual state of the system before and after the change . . ."³ Studying the actual changes themselves is not only seen as irrelevant, but impossible. Saussure wrote at the turn of the century that "the system is never observed in its evolution" (p. 143, fn. two); this was echoed in 1933 by Bloomfield: "The process of linguistic change has never been observed."⁴ Needless to say, it is also forbidden to base historical analyses on "external" factors.

Now, from the beginning, this theory of linguistic structure contradicted the reality of language, a fact which asserts itself even in the works of Saussure and his disciples. Language structure must be free of variation in order to be studied, but no one would deny that real languages are never met in such a pure state. The object of study is seen as one ideal speaker/listener, yet Saussure himself stressed that language is a social convention which can exist only within the community.⁵ Freezing language in time and space is seen as a necessary prerequisite to its study, although it is admitted that language is something entirely fluid, both temporally and spatially.⁶ Consideration of dialect variation is strictly forbidden in historical analyses, even though (in Saussure's words) "geographical diversity should be called temporal diversity" (p. 198).

William Labov is one contemporary linguist who has insisted that it is time to overcome these contradictions and study language on its own terms. In his important book Sociolinguistic Patterns (Philadelphia, 1972), he argues for the need to view language as a social phenomenon: our object of study should be the language of the community as it is used, not some homogenized abstract.⁷ Our model of linguistic structure has to take variation into account, not arbitrarily brush it aside. Thus, Labov has developed a heterogeneous model of language structure, which incorporates not only natural, systematic variation, but also the social and stylistic factors which influence it.⁸

The historical analogue to this theory is describing the process of linguistic change, not merely the "before" and "after" pictures. In "Empirical Foundations", Labov and his colleagues work out a theory of linguistic change which makes use of the systematically variegated structure just described. In simple terms, this view holds that before feature A changes to B, there is a period in which A and B coexist in free variation.⁹ This, in turn, means that it is entirely possible to actually observe linguistic change in progress. Labov, et al. have convincingly demonstrated that many cases of variation in synchronic systems can be analysed as changes in progress. Thus, under this hypothesis, language is set in its temporal continuum, with the necessity for viewing it in its spatial fluidity also acknowledged.¹⁰

Let us now consider a case from contemporary Belorussian (BR) which demonstrates the validity of these views. I will describe variation which seems chaotic and unsystematic when the dialects in question are studied in isolation, but which turns out to be quite regular and systematic when these dialects are set in their historical and dialectal continua. We will see that the variation is symptomatic of a linguistic change in progress.

BR is an East Slavic language which can be viewed as a series of dialects transitional between its better-known cousins Russian (to the East) and Ukrainian (to the South). BR dialectologists have discerned three major dialect groups: the Northeastern, the Southwestern, and the Central.¹¹ Generally speaking, the NE group is more innovative than the SW, and bears a very strong resemblance to Southern Russian. The SW group forms the basis of the young BR standard language. Central BR is the band of transitional dialects which runs between these two groups. A region striped by isoglosses, it marks the southern terminus of many of the innovations of the NE group (see maps).

Verbs in BR (indeed, in Slavic in general) historically belong to one of two productive conjugations. First conjugation verbs inherited the following present-tense paradigm:

	S	P
1	-u	-em
2	-eš	-ete
3	-e or -et'	-ut'

(N.B.: "t'" = palatalized t; "š" = [ʃ])

The variation in the 3s is ancient; -e is a feature of the SW group, and -et' is found in the NE. We may presume that from early on, there was free variation between these two morphemes in the Central zone. The 1p ending -em passed to -om under stress as part of a general East Slavic change of e to o. The second conjugation has essentially the same paradigm, but with desinence-initial i where the first conjugation has desinence-initial e, and a 3p ending -at'. Also, the 3s ending was historically -it' over the whole BR language area. Therefore, the inherited second-conjugation paradigm looks like:

	S	P
1	-u	-im
2	-iš	-ite
3	-it'	-at'

Verbs of both conjugations can take one of three stress patterns in the present tense. In the first, the ending is stressed in all six persons; in the second, a stem syllable receives the stress throughout; and in the third, the ending is stressed in the 1s, while a stem syllable gets the stress in the other five forms (examples of all these paradigm types can be found in Appendix 1). We may view the verbs which take the second and third stress patterns as one group, which I shall hereafter call the "stem-stressed" verbs.

Whereas the old opposition between the conjugations holds throughout the BR area for the end-stressed verbs, we see it breaking down for the stem-stressed verbs in the NE and Central dialects. In the NE, as part of a general vowel-reduction pattern, post-tonic e and a regularly go to i after palatalized consonants (i.e., V [-high] → [+high] [+front] / VC' š CV). This insured that all the old first conjugation endings in e became homonymic with the equivalent second conjugation endings. Eventually, they were reanalyzed as having /i/ underlyingly. The falling together of first- and second-conjugation stem-stressed verbs was completed when the first-conjugation 3p ending -ut' came to be used with verbs historically belonging to the second conjugation.¹² Thus it is perfectly permissible to state that there are now three conjugations in NE BR: the old first and second conjugations, seen only in end-stressed verbs; and a new "stem-stressed" conjugation, which uses the following set of endings:

	S	P
1	-u	-im
2	-iš	-ite
3	-it'	-ut'

The old relationship has broken down in the Central dialects as well, but the situation we see here is not nearly as tidy as that in the NE. Indeed, it seems downright chaotic. The only constant throughout the area is the 3s: all stem-stressed verbs take -e. As regards the 3p, the dialects fall into three groups: in the first, all stem-stressed verbs take -ut', as in the NE; in the second, most of these verbs utilize -at', with a small, but predictable group of old first conjugation verbs retaining -ut'; ¹³ finally, there are dialects which show free variation between the two endings in all stem-stressed verbs. In their treatment of the second person and the 1p, the dialects fall into three completely different groups: in small clusters of villages, the endings in i are met exclusively; in a number of villages to the east of Minsk, and in the extreme southeast of the area, the endings in -i and -e coexist with all stem-stressed verbs; in all other Central BR dialects, we discern this variation only among the verbs originally belonging to the first conjugation (second-conjugation verbs still use only the endings in -i). Map Two illustrates the geographical relationships of all these different patterns, and Appendix Two contains sample paradigms.

Successfully analyzing this complexity--and ascertaining its full significance--while operating under the old, arbitrary restrictions is patently impossible. By describing each Central dialect individually, without reference to the others, we ignore the transparent relationships between these different conjugational patterns, not to mention the possibility that they are merely different manifestations of one general process. By purposely eliminating reference to the neighboring NE dialect group, we turn a blind eye to another set of obvious similarities. And by not looking back to the past--and ahead to the future--we miss a chance to comment on a major development in the East Slavic language area. The fact is, this seeming chaos in the conjugation of stem-stressed verbs in Central BR represents a systematic linguistic change in progress: the formation of a special paradigm for these verbs.¹⁴ It represents the spread southwestward of the NE conjugational type, shows how individual Central dialects have been adapting to this pattern, and shows how the NE pattern arose. By extension, it provides us with valuable clues to the development of vowel reduction in East Slavic.

It is logical to suppose that the NE vowel reduction rule $V[-\text{high}] \rightarrow [+high] [+front] / \sqrt{VC' _}$ {CV developed gradually, working first in a limited number of environments, then becoming more and more general. There is every reason to suppose that the first environment in which this rule worked was $/C' _ C'$ --between two palatalized consonants. Indirect evidence for this comes from acoustic analyses of Contemporary Standard Russian which show that all vowels--high, mid, low, stressed pre-, or post-tonic--have raised and fronted allophones between palatalized consonants.¹⁵

This means that the first present-tense endings to have been affected by this vowel reduction rule in NE BR would have been the first-conjugation 3s, and the second-conjugation 3p, both of which would have passed to [it']. Because of its homonymity with the second-conjugation 3s ending, first-conjugation [-it'] /-et'/ soon came to be reanalyzed as underlying /-it'/. The use of /-it'/ with first-conjugation verbs spread southwestward; when it reached the Central dialects, it profoundly altered the already existing 3s variation, which, as we have seen, was:

	1conj		2conj
3s	-e	-ét'	-it'

This relationship now came to look like:

1conj		2conj
end	stem	end
e	e	it'
ét'	it'	it'

In the next step, the variation in the first-conjugation stem-stressed verbs spread to the stem-stressed second-conjugation verbs:

1conj		stem		2conj
end		stem		end
e		e		it'
ét'		it'		it'

This situation was resolved by fixing the distribution of the three different 3s morphemes. With -it' being the only ending possible for the second-conjugation end-stressed verbs, -e naturally became the one ending possible for the stem-stressed verbs. This in turn insured that -et' became the only desinence used with the first-conjugation end-stressed conjugation. Thus:

1conj	stem	2conj
(end)		(end)
ét'	e	it'

This series of processes was put into motion sufficiently long ago to be now completed throughout the Central BR region.

Meanwhile, the second-conjugation 3p ending had fallen together with the 3s form -it'. This case of homonymity was deemed unacceptable--in no Slavic dialect will the 3s and 3p take the same ending--and the distinctive first-conjugation 3p ending -ut' started to be used with these verbs. When this analogical change reached the Central band, second-conjugation -ut' entered these systems first as an optional form, coexisting with -at'. Therefore, at this stage, we have the following relationships:

	stem-stressed	
	1conj	2conj
3s	-e	-e
3p	-ut'	-at'~ut'

The 3p variation then spread to the first-conjugation verbs, giving:

	stem-stressed	
3s	-e	
3p	-ut'~at'	

Obviously, different dialects are resolving this variation in different ways. Some have generalized -ut' for all stem-stressed verbs, while in several others, -at' has all but won out. In a third group, the variation remains unresolved.

Post-tonic V [-high]→i subsequently became operative in other phonetic environments, and thus came to affect the remaining first-conjugation endings. Due to a paucity of relevant data, it is not possible to detail the later developments, but they would certainly have been analogous to those which affected the 3s: e to i, giving [-is, etc.]; then reanalysis to /-iš, etc./. The penetration of the Central dialects would resemble the case of the 3p--at first, variation in the first conjugation (eš~iš, vs. 2conj iš), which then spreads to the second conjugation (stem-stressed eš~iš). The fact that this variation is still largely unresolved suggests that it arose much later than the third-person phenomena. Most Central dialects show either the first stage (variation in the first conjugation only) or the second (variation in all stem-stressed verbs). In only a handful has the variation been eliminated in favor of the forms in -i.

To summarize, the seemingly wild variation in the conjugation of stem-stressed verbs in Central Belorussian is merely a reflection of the merger of these verbs into one paradigm in the NE dialect group. The data from the Central dialects shows that this merger took place in several discrete stages, each affecting different members of the paradigm, and each reaching the Central band at different times. We now see the falling together of first- and second-conjugation stem-stressed verbs into one paradigm at different stages of completion in different parts of the area. If these dialects were allowed to develop naturally, with no outside interference (an impossible occurrence in these days of mass media and compulsory education), we should expect to see this process completed within the next several years.

Looking beyond the verb system, it is apparent that these developments represent an early stage in an even broader and more far-reaching phenomenon--the spread south and west of the vowel re-

duction rule V [-high]→ [+high] [+front]/VC' __. This is not the place to chronicle all the available evidence, but it is clear that this rule has been penetrating the Central BR dialects in successive waves from the Northeast. Map Three demonstrates this vividly. This situation should be studied closely to ascertain the details of the spread, and to illuminate the connection between vowel reduction and morphology indicated by the isoglosses on our map.

In this report, I have attempted to dramatize the need for linguists to view language as 1.) a heterogeneous system, and 2.) part of historical and dialectological continua. It is true that not all systems display the extensive variation of the Central BR dialects--historically unstable, the latter fairly demand to be taken on their own terms. Our model of linguistic structure must be flexible enough to describe such systems, however. The insights gained by structuralists and generativists while utilizing Saussure's basic concepts and rigorous methodology can hardly be denied. Our task now is to move one step further and use these insights to describe language as it is actually encountered. This will not be an easy task; but we have every indication that it will be a supremely rewarding one.

Footnotes

1. Note, for example, the following statement from Jerzy Kurylowicz' 1964 article "On the Methods of Internal Reconstruction" (Proceedings of the Ninth International Congress of Linguists, The Hague): "Once we leave language sensu stricto and appeal to extralinguistic factors, a clear delimitation of the field of linguistic research is lost" (p. 11). Also see Saussure, Course in General Linguistics (New York, 1966), p. 19.
2. Noam Chomsky, Aspects in the Theory of Syntax (Cambridge, 1965), p. 3.
3. Kurylowicz, pp. 11-12.
4. See Language (New York, 1933), p. 347.
5. Course in General Linguistics, p.14, et passim.
6. See Saussure, pp. 140, 191-211, esp. p. 201; Kurylowicz, p. 9.
7. See especially Chapters Eight and Nine. They contain extensive discussions about the differing views of linguistic structure and the permissibility of referring to extralinguistic factors in one's analyses.
8. See Patterns, Chapter Seven; also Labov, Weinreich, and Herzog "Empirical Foundations for a Theory of Language Change" (Directions for Historical Linguistics, Austin, 1968; pp. 98-188).

9. "Empirical Foundations", pp. 184-85, et passim.
10. "Empirical Foundations", p. 155.
11. Most contemporary investigators discern a fourth group, found around the city of Brest in the extreme southwest of the language area. They bear a strong resemblance to Northern Ukrainian, and do not figure in any way in the present discussion.
12. This is the traditional Soviet explanation. See, for example, Mackevič Marfalohija dzejaslova u belaruskaj move (Minsk, 1959), p. 57. Soviet linguists do not state outright that the reanalysis of the forms has taken place, but this is certainly explicit in their works.
13. These are the first-conjugation verbs which show an alternation in the present-tense stem between non-palatalized and palatalized consonants: e. g., from the future of byt' "to be": búd-u "I will be" and búd-ut' "they will be", but búd'-eš "thou shalt be", búd'-e "will be", etc. In second conjugation verbs, the stem-final consonant is always soft before -at' (vód'-at' "they lead"). Speakers of Central BR dialects have not yet decided whether the form would be *búd-at' (after búd-ut') or *búd'-at' (after vód'-at'). For a discussion, see R. Miller The Geographical Distribution of Present-Tense Endings in Belorussian Dialects (Doctoral dissertation, Harvard University, 1980), pp. 5.33-5.38.
14. This, to my knowledge, is the only example of a systematic grammatical change seen in progress. Labov himself reported in Patterns that such changes have yet to be observed in the field (pp. 274, 322).
15. See Panov Russkaja fonetika (Moscow, 1967), pp. 48-58, 72, 253, 255; L. G. Jones "Contextual Variants of the Russian Vowels" (in Halle Sound Pattern of Russian, The Hague, 1959), pp. 162-166.

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Appendix One: Sample Belorussian Verb Paradigms: The Two Conjugations and Three Stress Patterns.

First Conjugation

Fixed End Stress: ici'--"to go (on foot)"

S	P
1 id-ú	id'-óm
2 id'-és	id'eté
3 id'-e/-ét'	id-út'

Fixed Stem Stress: znát'--"to know"

S	P
1 znáj-u	znáj-em
2 znáj-es	znáj-ete
3 znáj-e/-et'	znáj-ut'

Mobile Stress: pisát'--"to write"

S	P
1 piš-ú	piš-em
2 piš-és	piš-ete
3 piš-e/-et'	piš-ut'

Second Conjugation

Fixed End Stress: sjadét'--"to be seated"

S	P
1 sja3-ú	sjad'-ím
2 sjad'-iš	sjad'-ité
3 sjad'-it'	sjad'-át'

Fixed Stem Stress: stávit'--"to put, place"

S	P
1 stávl'-u	stáv'-im
2 stáv'-iš	stáv'-ite
3 stáv'-it'	stáv'-at'

Mobile Stress: kosít'--"to mow"

S	P
1 koš-ú	kós'-im
2 kós'-iš	kós'-ite
3 kós'-it'	kós'-at'

These hypothetical paradigms can be taken as the historical starting point for the developments discussed in the paper. With 3s -e in first-conjugation verbs, they can also serve as underlying paradigms for SW BR dialects; examples of NE paradigms on Appendix 3.

Appendix Two: Examples of Different Stem-Stressed Paradigms from Central Belorussian Dialects.

These paradigms are generalizations based on data from Atlas, Mackevič, and Xrestamatyja, as well as the discussions in Mackevič, Narysy, and Linhvistyčna heahrafija. They stand for all verbs with fixed stem stress, and mobile stress.

Type I: Northwest of Central Zone.

S	P
1 znáj-u, koš-ú	znáj-im, kós'-im
2 znáj-iš, kós'-iš	znáj-ite, kós'-ite
3 znáj-e, kós'-e	znáj-at', kós'-at'

Type II: East of Central Zone.

= Type I, only w/ 3p in -ut': znáj-ut', kós'-ut'

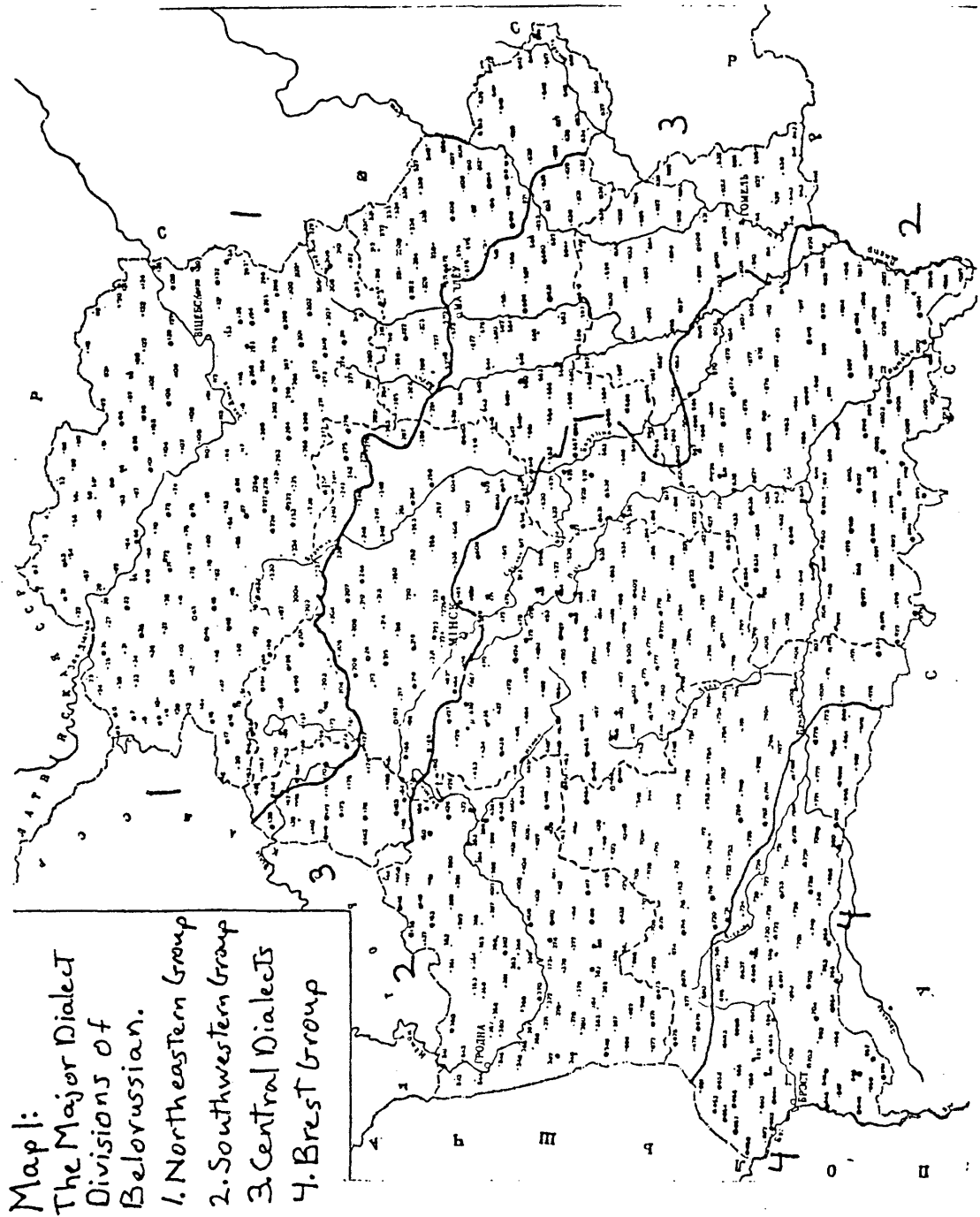
Type III: Minsk area & Southeast of Central Zone.

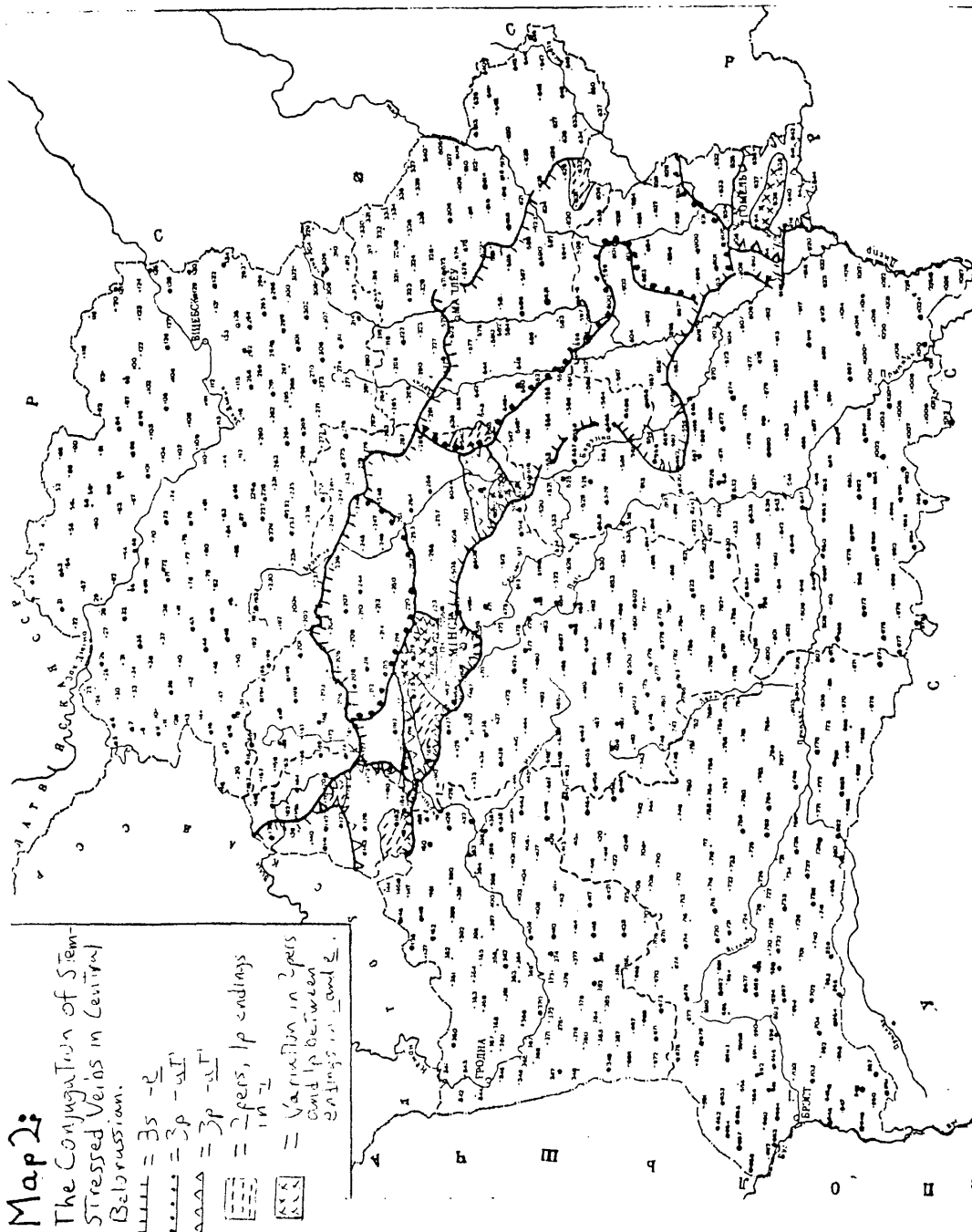
S	P
1 znáj-u, koš-ú	znáj-im/-em, kós'-im/-em
2 znáj-iš/-eš, kós'-iš/-eš	znáj-ite/-ete, kós'-ite/-ete
3 znáj-e, kós'-e	znáj-at', kós'-at'

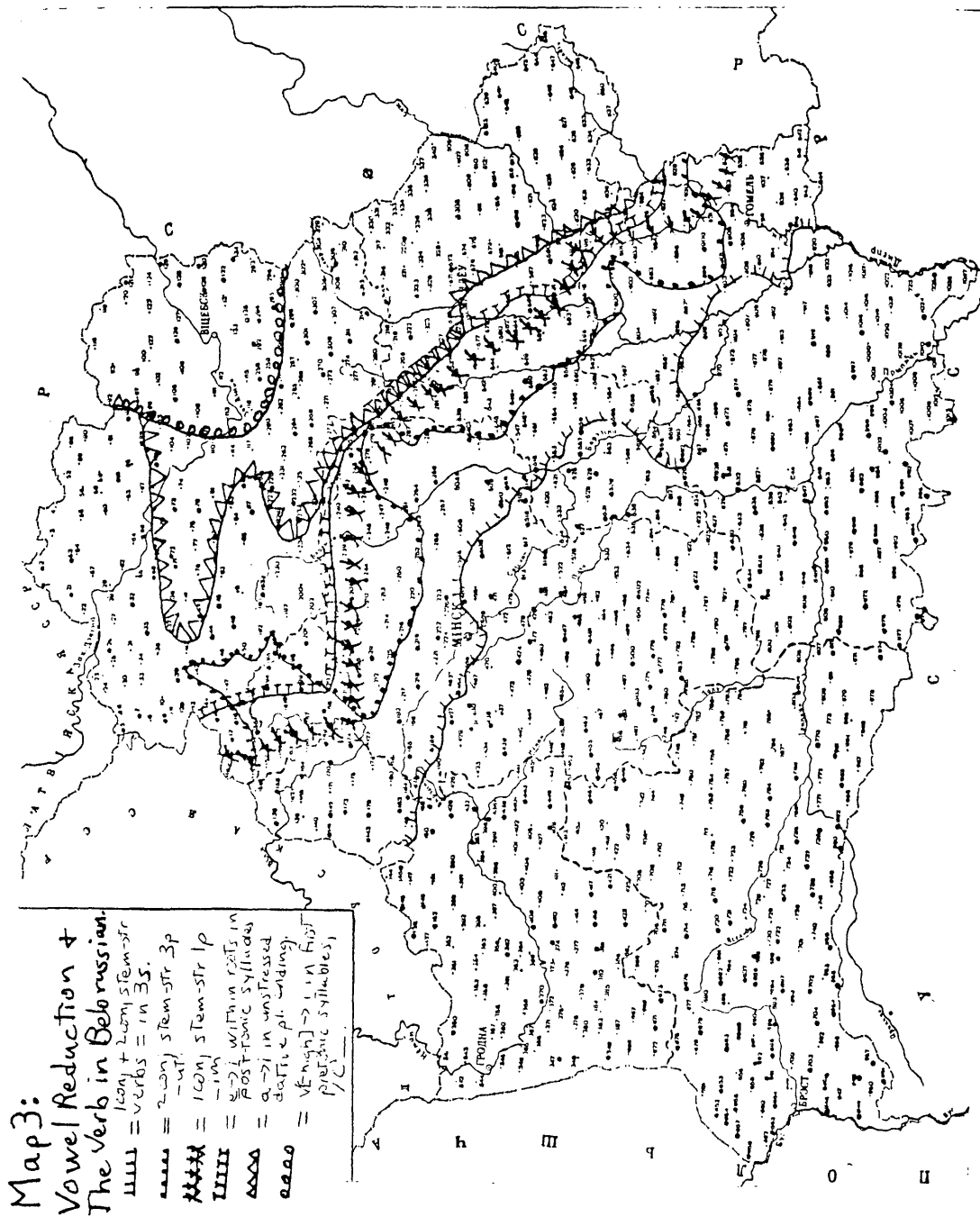
In other Central BR dialects, there be variation between the endings in -i and the endings in -e only among the first-conjugation verbs (second-conjugation verbs retain endings in i), and there will be variation between the two 3p endings with all stem-stressed verbs. In all Central dialects, the 3s for these verbs is -e.

Appendix Three: Examples of the Stem-Stressed Conjugation of Northeastern Dialect Group.

1 znáj-u, koš-ú	znáj-im, kós'-im
2 znáj-iš, kós'-iš	znáj-ite, kós'-ite
3 znáj-it', kós'-it'	znáj-ut', kós'-ut'







The Use of the Inverse Form in Malecite Sentences¹

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In the Indoeuropean and many other languages of the world, most verb forms in sentences depend on the number and the person of the subject, and they can be first, second or third person singular or plural. This gives six possible forms for a paradigm, except for imperatives and some other special forms.

In the Algonquian languages, including Malecite, the whole system of verbs is very different from this. The basic principle is also different, namely: the verb can depend not only on the subject, but on the subject and the object of the sentence. Thus there are animate intransitive, inanimate intransitive verbs where the dependence on the subject is similar to that of the Indoeuropean languages; but there are also transitive animate and transitive inanimate verbs where the animateness or inanimateness (we call it "gender",) ... the gender, the person and the number of the object are as important as the gender, number and the person of the subject.

But there are several other features in the Algonquian languages which are totally unknown in any Indoeuropean grammar, for instance the obviation (when two third persons are involved in the action), or the fact that the first person plural can be exclusive or inclusive, in other words: "we without you" and "we including you". One of the striking differences is the so-called inverse form. The topic of this paper is the way the inverse form is materialized in Malecite sentences.

What is the inverse form? This is a term of Algonquian linguistics. It refers only to transitive animate verbs. If we want to say in any Indoeuropean language "I see him", first person is the subject and third person is the object. We can do it also in Malecite, we can say namiya 'I see him'. But if we add the inverse theme sign -ak, plus the third person marker -w, we receive namiyakw. This means that the grammatical subject "I" does not act on the grammatical

object "him", but the other way around. In other words: nəmiyəkw does not mean 'I see him', but 'I see him the other way around', that is 'he sees me'. This is called inverse form.

For the further study of the inverse form we have to know this general principle: It means that not this person is acting on that one, but that one is acting on this one. The "inverse" is most common with third person logical subject, which leaves mathematically only fourteen realizations: "he... me", "he... thee", "he... him", "he... us (incl.)", "he... us (excl.)", "he... you", "he... them", "they... me" etc.

Further in this paper, we want to know whether these possibilities are materialized in indicative, relative or conjunct verbs. They are. But in the inverse conjunct there are also other formal elements, not only the inverse theme sign -ək. For this reason, the conjunct will be the topic of another article. In this paper, the use of the indicative and relative inverse verbs will be studied. If we multiply fourteen by two, we might have twenty-eight different realizations of the inverse form in our sentences with indicative or relative verbs, if we count only with animate subjects. The total number could be still higher if we count also the possibility of inanimate subjects, "it"-subjects, which I leave out of this investigation.

Before quoting inverse constructions, let us see a few cases where there is no need for the use of the inverse form.

If second person acts on first person, the Malecite language has special devices to express it, without inverse form. E.g.

wicōhkēmin 'Help me!'

The same is true about the situation when first person acts on second person, e.g.

k-nəmiyəl 'I see you'.

No inverse form is needed when first or second person acts on third person, e.g.

n-tiyā nət skītap 'I said to this man';

naci-wicōhkēman nət k-tēhpītem 'Go and help her, your wife!'

There is a so-called "inverse theme sign", which is theoretically -ək in Malecite. But usually it is not materialized as -ək, because how it is materialized depends very much on the environment. Within the verb complex, the sign -ək can be placed after a or ə, and in these cases the k is always lenis. When it follows after m or w, it sounds always fortis. To make the proper pronunciation easier, I mark it with hk when it is fortis. Since in real sentences with inverse verbs, third person is acting, the third person marker w or o is almost always there after the inverse theme sign, and the ə vowel disappears in most real forms. In real sentences, it appears mostly in the complexes -kw, -ko, -hko.

The first combination of the persons involved is "I... him". (To non-Algonquianists I have to mention that this includes also "I... her", because there is no difference between masculine or feminine gender.) Without the inverse theme sign it would mean "I... him", but with it, it is the other way around, that is "he... me". This is one of the most common situations where the inverse form occurs.

In most sentences I found for this situation, the statement is positive, and an indicative verb is used, ending in the complex -kw or -akw. E.g.

kətəmakitahəmək cel 'She even felt sorry for me';

yot-te n-tociphək / pīhtīnək 'Right here, it (i.e. the bear) grabbed me on my hand';

n-peci-maliyapəmək 'He came to bother me';

kəlōhtakw-tāhk n-kīhtakwhəmom 'He doubted me, my old man'.

If it is a negative sentence, the indicative verb is used with negative preverb, inverse theme sign and

negative final (w or o). The co-occurrence of the inverse theme sign and the negative final results in the complex -əko or -ako in the transitive animate verbs. E.g.

kātəp kek w kisi-lehləkō nil 'She cannot do anything to me';

ma-tapenhkākō taktal 'He did not pay me, the doctor';

ma-keskōhtēhkako nocinhpilowet 'He did not catch me, the doctor'.

Seldom, the verb can be supplied with the preterite enclitic -hpən, e.g.

n-tiyokōhpən / wət iya / nocimīhkōkēmit 'He told me, this here, the preacher'.

Besides the indicative verb, the relative verb can occur in this function. Since only the indicative verb can be used in negation, we have to rule out the possibility of negation with relative verbs. All such examples of the inverse form in my corpus are positive statements. With the relative final -(ə)n, the verb appears with the complex -kon or -hkon. E.g.

nikwəhs sapiphōkon skitkəmikw 'My mother brought me through on earth';

kikcāhkiw wīhkwiḥkon 'She sent for me down the hill'.

In the case of double goal phrases, where both an animate ('me') and an inanimate object ('it', 'them') are involved, the -(ə)n element is there only once in the verb complex. I think this one -(ə)n is the realization of two -(ə)n suffixes; one is the relative mode marker, and the other one refers to the inanimate object. E.g.

kisnōhmowewhkon 'She brought it for me';

tēhpo-ēhta kisi-milḥkon nīta 'He gave me only that'.

If the inanimate object is more than one, the inanimate plural marker -əl will be added, which results in the

complex -kōnəl, -hkōnəl. E.g.

mətēhtēhmākōnəl 'He gathered many (medicine plants) for me';

tətlapenhkākōnəl 'She will pay me for them';

n-totemiskw / yōhtəl milhkōnəl / əkwtewakənəl 'My friend gave me those clothes'.

The second situation we are going to investigate is: "he... thee". Again, we have sentences in our corpus with indicative and relative verbs.

Examples with positive indicative verb (complex -əkw):

k-nəkələk-w-ə-te 'She left you';

nakskəm kolitahasowēwək 'God bless you!';

məcahanht k-macephək 'The bad devil will take you'.

Here is a negative sentence with the complex -oko:

ska k-macephōko nocinhpilowet 'He will not take you (in his car), the doctor'.

Sentences with relative verbs (complexes -hkon or -kon):

wen k-wicōhkemhkon 'Someone helps you';

tan-p-al təkə k-tli-pecōhsamhkon / təkə / kikowak? 'How could he, nowadays, come to you, now, to your home?';

tan-lo kisi-lēhləkōn? 'What did he do to you?'

In the case of two third persons involved ("he... him"), the inverse form indicates that not this one is acting on that one, but that one is acting on this one. But grammatically the subject and the object behave to a certain extent as if it was not inverse. I mean that the grammatical object will have the obviative ending if there is obviation in the sentence. The obviation is marked on the grammatical object and on the indicative verb. Here is an example with obviation:

weckowi-tōhkiyat t̄tlikikc̄ək̄n̄ək̄ol w̄enil 'As he was awakening, somebody was tickling him'.

In negative sentences with the situation "he... him", I could observe two different complexes at the end of the verbs, namely -w̄ik̄əl and -hkowiyl. These two complexes consist of the same elements. Both of them contain the negative final, the inverse theme sign, and the obviative ending (and two theme vowels). But the sequence of two elements is different: in w̄ik̄əl the negative final is before the inverse theme sign, in the complex -hkowiyl it is after the inverse theme sign. This difference of their sequence results in different theme vowels, and this is why the two complexes seem to be so different from each other, even though they are the same elements, with the same function.

Here is an example with the complex -w̄ik̄əl:

mate apc n̄amiyawik̄əl 'He did not see him again'. A spirit and a man are the characters in the story where I found this sentence. The spirit is acting in this part of the story. This is the reason why the man is "the other one" here. Another version of the sentence, namely mate apc n̄amiyawiyil would mean 'he did not see him again', but in this case the spirit did not see the man. If the man did not see the spirit, the inverse theme sign is added. Instead of... n̄amiyawiyil, the verb appears as ...n̄amiyawik̄əl.

Here is a sentence with the other possible complex for inverse plus negation plus obviation, namely with the complex -hkowiyl:

ceskat-yakw/ nekwt / k̄alolhkowiyl 'He did not even once speak to him'.

There are many other combinations of endings with the situation "he... him", because in such sentences we can expect also the obviative ending to be present in the complex. For instance, the complex -hkolhc contains the inverse theme sign (-ək), the person marker (w̄ or o), the obviative ending (-əl), and the future-dubitative-conditional enclitic (-c̄ or -hc̄). Here is a sentence with this complex:

w̄ahc̄ētākōlh-c̄-yakw 'He (the other one) would wave at him'.

If the predicate is a TA relative verb, the complex will be simpler, it will be -kon. Why is it simpler with a relative verb than with an indicative verb? Because if there is obviation in the sentence, it is always marked on the animate object, it is always marked on a TA indicative verb, but it is never marked on a TA relative verb. In both of the following two sentences, the obviation is marked on the grammatical object (nīhtəl... kci-cək wəłhsəl and yōhtəl... məkalipowol), but it is not marked on the two verbs, ending in the complex -kon:

təltəkwhowīhtākon / nīhtəl iyil / kci-cək wəłhsəl 'It jumped at her, this here, the big frog';

ən-yakw yōhtəl tətłsākīyōkon məkalipowol 'And this one here, it kept on looking at him, the caribou'.

In the case of the context "he... us", we find two most common suffix-complexes at the end of the verb: - kon (or -hkon), and -kōnen (or -hkōnen). The first one is indicative, the second one is relative.

Examples for the indicative:

kisiyolhkon 'God' (literally: 'He made us');

n-tlāhkohōkon 'She cooked for us';

cipətok / kət, makelməkon / wət kikw,hsən 'Maybe, she might be sorry for us, this, our mother'.

In these three examples, there is no second person prefix (k-), which means that we deal with exclusive first person plural. But the exclusiveness of the first person plural is not important in some of these situations. It would be strange to say that "God made us, but He did not make you". Sometimes, if they want to express clearly that you are not included, they add the exclusive first person pronoun: nīlon. E.g.

nakā nət ēhpit / yot wiki-pēcīyat / kisīmiyewhkon-yakw nīlon / nikwəhsəl 'And this woman, who often comes here, she prayed for us, (for me and) my mother'.

The inclusive first person plural occurs very seldom with the inverse form. To express the inclusiveness, they put the second person prefix (k-) before the inverse indicative verb. E.g.

k-wicōhkahamhkōn kikwəhsəŋ 'She will help us, our mother'.

What happens in a negative sentence? After the negative preverb, the indicative verb follows with the suffix complex -kōwin. This complex is the same as -kōn, but with the negative final w between the inverse theme sign and the person-number marker. E.g.

əŋ mihtakws / ma n-tepawhsikhokōwin 'And my late father could not feed us all';

mate nənakōwin 'She didn't know us'.

The complex -kōnen (or -hkōnen) is there at the end of the relative verb, in sentences where the situation is "he... us". E.g.

anhkwəc wen / wət iya / wət ēhpit / təpinakōnen / kəsnā wen piləwey 'Sometimes, someone, this here, this woman would watch us, or somebody else';

əŋ nit / n kakalomhkōnen kəskwəhsōhs 'And then she called out to us, the old lady';

ənəc nəkləkōnen nīlon 'And then he would leave us';

əŋ peci- əlnāhkwapishamākōnen 'And she phoned us';

əŋ milimhkōnen / etlinōtahat 'And she called us names as she went out'.

I could find only two verbal enclitics with "he... us" inverse TA verbs. One of them is the preterit enclitic -hpəŋ which follows after the suffix complex -(h)kōn:

n-kislōhkewhkōnōhpəŋ 'She had worked for us'.

The future dubitative enclitic -(h)c does not join the

verb, but another word at the beginning of the sentence:

mec-tē-hc nət kətonləkon 'Still he will be after us'.

The phrases with "he... you (plural)" are not common. The suffix complex is -(h)koniya. E.g.

wen iyey k-wicōhkemhkoniya 'Someone helps you'.

One could make a similar statement about all inverse phrases where third person plural is acting ("they... me", "they... thee" etc.) All of them occur in the texts very seldom.

If they act on me, the inverse suffix complex is -kon (the same as in the situation "he... us"):

kisi-yohōkon 'They told me'.

I could not find any sentences with inverse TA verbs where they would act on thee or him.

If they act on us, the verb ends with the suffix complex -konnok:

ɔləmohsək / wəkwiłhətowok / matnəkonnok 'The dogs were barking. They were fighting us (i.e. they were barking when they noticed us)'.

For "they... you (plural)", there is no particular suffix complex. The inverse theme sign -(ə)k simply joins the TA verb. In our example, it is still followed by the future-dubitative-conditional enclitic -(h)c:

kəhsephōkəc 'They will take you in'.

In the situation "they... them", the TA verb ends in the suffix complex -koniya (which happens to be the same as in the phrases with "he... you, plural"). Here is an example for "they... them":

nəkətməniya-yakw / matnəkoniya / nihiht / ska kətōhsmolhtihkw 'They were afraid that they would fight with them, those, if they did not drink'.

The inverse theme sign is one of those small devices of the Malecite language which enables the speaker to reduce the number of words in the sentence to an almost unbelievable minimum, contrasting it with any Indoeuropean language. For instance, the inverse verb form noli-skowiməkw is one word in Malecite, and we need seven words to express the same statement in English: 'He spoke to me to make me good'.

FOOTNOTE

1. All Malecite sentences are taken from the Malecite stories I noted down and deposited in the Archives of the National Museums of Canada. (So far ten volumes.)

On Becoming a Speaker of an SVO Language
and its Non-Typology-Specific Effect

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Studies of second language acquisition in young children have noted the rapidity with which a second language is acquired. While extra-linguistic factors undoubtedly contribute to this rapidity, the type of linguistic knowledge made available by the level of development attained in the first language is presumably also of decisive influence. This paper examines age-related aspects of second language speech in young French-speaking children. It is proposed that young children below the age of 3-4 still approach L2 learning with a grammar in which the pragmatic component is predominant. Children 4 years of age and older have available for transfer to the L2 acquisition task a grammar with an autonomous syntactic component. This grammar generates subject - predicate structures in which the occurrence of sentence categories like subject and object is no longer conditioned by discourse constraints.

1. Studies of children's early word combinations carried out in the sixties suggested that word order consistency and conformity to adult word order characterized L1 acquisition (Brown, Cazden & Bellugi-Klima 1969). In retrospect this finding must be viewed as a premature generalization based on data of English-speaking children. More recent studies by Bowerman on Finnish (1973), Bates on Italian (1976) and Park on German (1974) have drawn attention to the existence of considerable word order variability. Older diary-type studies of French by Bloch (1924) and Grégoire (1947) also make mention of a high degree of word order flexibility.

In contrast to these recent and older studies of L1 acquisition, research on child L2 acquisition has thus far supported the position according to which word order learning is marked by consistent word order usage and, in general, conformity to adult word order. One study that has specifically addressed this contrast in the two acquisition types (i.e., L1 vs. L2) is Felix 1977. He proposes the following hypothesis in explanation of why child L2 learners of German do not recapitulate the word order variety found in their L1 counterparts. Unlike the L1 learner, who goes through a presyntactic stage of learning during which word combination rests on conceptual - semantic relations (e.g., ACTOR, ACTION, OBJECT ACTED ON, etc.), the child L2 learner begins the acquisition task directly with the learning of syntactic structures. His prior initiation into a syntactic system allows him to skip over the presyntactic stage.

Felix adduces several types of evidence in support of this hypothesis. First, he notes that early speech production in the L2 contains neither subject-object strings, nor pivot structures

of the type all gone juice. Both of these construction types are amply documented in the early word combinations of L1 learners. Felix interprets this to mean that the L1 learner is more creative vis à vis the adult model, whereas the L2 learner relies more directly on models in his linguistic environment for his early constructions, this being made possible by his prior syntactic knowledge. Secondly, in his longitudinal L2 study Felix found that all four children commenced speech production with semantically depleted utterances such as this is this. From this he concludes that in L2 acquisition the communicative intention manifests itself in a syntactic structure, that is, in formal patterning rather than lexical-semantic richness. Finally, Felix makes what I consider a valid generalization when he observes that the descriptive frameworks that have been applied to the description of L1 and L2 acquisition are in themselves revealing as to differences between the two acquisition types. Thus early L1 development lends itself to description in terms of the emergence of semantic roles and their ability to appear in a wider range of syntactic functions (e.g., Bloom, Lightbown & Hood 1975; Greenfield & Smith 1976). In contrast, L2 acquisition by young children does not seem amenable to such a descriptive framework (Lightbown 1977). Both Felix and Zobl (1980) have drawn attention to the sequential emergence of sentence types and the gradual expansion and spread of syntactic categories across different sentence types.

1.1. This paper is an attempt to expand and refine on Felix's insights into the type of linguistic knowledge available to the child L2 learner by virtue of his prior initiation into a linguistic code. To this end the paper will examine a word order phenomenon that is abundantly attested for French L1 acquisition: the occurrence of VS or, more generally, predicate - subject strings. This word order does not reappear in the acquisition of French as a second language by children five years of age and older. In a study of English L2 development in a group of French-speaking preschoolers the author also found occurrences of VS word order, but only in the speech of the youngest subjects, all of whom were below the age of four. Learners above the age of four observe canonical adult word order. The paper will propose that VS and predicate - subject strings actually represent COMMENT - AFTERTHOUGHT TOPIC patterns. The transfer of this pattern to English is made possible by two factors. First, in very young children's grammar the pragmatic component is still relatively unconstrained by the syntactic component. This pragmatic component generates topic - comment structures and permits deletion of major sentence categories in response to discourse constraints. Secondly, it will be argued that the virtual non-existence of verb - subject and predicate - subject strings in English L1 acquisition is due to word order rigidity in the adult language which in turn suppresses in part the power of the pragmatic component of young children's grammars.

The absence of this non-standard word order in French L2 and English L2 of older children very probably relates to a major reorganization in children's grammars between the age of 3-4. The paper will seek to show that this reorganized grammar provides the abstract basis for L2 acquisition in children above four and that it makes possible the consistent word order strategy noted in the literature.

2. FRENCH L1 ACQUISITION. Grégoire, François et al. (1977), François (1978) and Malrieu (1973) have all drawn attention to the prevalence of dislocation in spoken French and its impact on the sentence construction process in French L1 acquisition. Dislocation leads to both a delay and a marked underrepresentation of noun - verb constructions in the period spanning the onset of word combination to the age of three. Grégoire, for example, notes that constructional patterns involving right dislocation of the subject noun were the dominant type in his children during the third year. To the frequency of this sentence type in input we must add the perceptual difficulty posed by unstressed clitic pronouns. The combination of these two factors in the linguistic input gives French not only a semblance of greater word order freedom; it also provides the child with apparent VS models which reappear in the speech of French children:

est tombé caillou (1;8)	(François 1978)
par terre...crayons (1;10)	(Bloch 1924)
partie maman (2;1)	(Bloch 1924)
est fatigué papa (2;3)	(Grégoire 1947)
fait comme le cheval bébé (2;3)	(Grégoire 1947)
méchante ma petite soeur (2;10)	(Bloch 1924)

It should be noted, however, that these VS construction patterns are not merely the product of the linguistic environment. Of the subject pronoun omission Grégoire observes: "Ils (his two sons) ne l'ont pas omis par hasard, mais parce qu'il ne s'imposait d'aucune manière à leur attention: le mot capital était le verbe...." (p.190) Grégoire's interpretation of pronoun omission is essentially pragmatic: the important new information expressed by the verb comes first in the utterance.

More recently, Malrieu has proposed a very similar account of the frequency of VS constructions in French L1:

La fonction du sujet n'est pas, au début, de marquer la cause du changement, ou la réalité porteuse de la propriété, mais de souligner, en complément pour ainsi dire du prédicat, la provenance de ce dernier, la différencier d'une autre possible.... (p.11)

Both Grégoire's and Malrieu's comments are entirely in keeping with an interpretation of these VS sequences as instances of comment - afterthought topic structures. This interpretation has the advantage of corroboratory evidence. In her study of word order

in Italian L1 acquisition, Elizabeth Bates concludes that VS sequences in child speech (which unlike VS sequences in adult speech are not marked for emphasis) represent a developmental extension of the pragmatic strategy underlying one-word utterances. In one-word utterances the child lexicalizes the most informative element of a referent situation; in subsequent two-word combinations this strategy is continued. Important information is placed in utterance-initial position; the topic, which in the previous stage was left unexpressed, is now expressed as a kind of afterthought.

2.1 ENGLISH L1 ACQUISITION. Before turning to an examination of the English L2 data of the French-speaking learners, a word is in order on English L1 acquisition. As I stated in the introduction, the argument of fixed word order in child L1 acquisition was a premature generalization based on English-speaking children. However, this still does not seem to invalidate this observation as far as English children are concerned. Brown, Cazden and Bellugi-Klima remark that their data on three English children, Adam, Eve and Sarah, contained only a 'handful of exceptions' (p. 42), all of which appeared to involve cases of object fronting:

paper find
daddy suitcase go get it
paper write

Melissa Bowerman's English-speaking informant, Kendall, produced a few isolated VS patterns when her MLU was 1:48:

hug Mommy
see Kendall

and Braine (1963, 1976) reports a small number of such utterances in corpora based on the beginnings of combinatorial speech, e.g.,

allgone juice
comes elevator
carry Mommy
boomboom tower

The one study of an English L1 acquirer which deals specifically with a comparatively pronounced occurrence of VS structures is Gruber 1967. Mackie, the informant, was between 26-29 months old when these utterances were produced and therefore at a stage of linguistic development beyond that from which the examples above are taken. A further point of note is that linguistic input to Mackie apparently contained few noun - verb structures; instead, Gruber notes that subjects were overwhelmingly encoded by pronoun forms. In a critique of Gruber's analysis, Felix (1975) contends that Mackie is not a very representative English L1 acquirer by virtue of the more marked occurrence of VS sequences. While I agree with Felix that Mackie may not be typical of English children,

it is my position that Gruber's analysis is essentially correct. Gruber analyzes Mackie's utterances as topic - comment structures rather than subject - predicate structures on the basis of distributional privileges shared by nouns and case-marked pronouns, arguing moreover that unmarked pronouns are no more than pre-verb inflections. While space does not permit a summary of Gruber's argumentation and all aspects of his data on which it is based, it should nevertheless be evident that there are crucial similarities between the linguistic input to Mackie and to French children: in both cases noun - verb sequences are rare.

3. THE STUDY. The data to be discussed below stem from an eight-month study by the author of a group of French-speaking children ranging in age from 2;6 to 5;9 at the commencement of the period of observation. All data from the children were collected in play situations in which the investigator was an active participant. Speech was recorded by placing a battery powered recorder strategically close to the play action which as a rule was confined to two children (often only one) and the investigator. All recordings were made in a French nursery during weekly visits lasting two hours.

The data that will be dealt with here stem from the three youngest informants: Marc (2;6), Jamie (2;8) and Michelle (2;10).

3.1 Let us consider a number of utterances that conform to the verb - subject and predicate - subject patterns.

Michelle:

1. my nom is that
2. is a piece this
3. cable (=candle) blue is this
4. is ready ... ship ça
5. hey! played in the bed /vuvu/ (=dog)
6. you sick...docteur is me!

Jamie:

7. a moon that
8. elephant plane is this
9. stop my plane
10. it goes train
11. goes cars

Marc:

12. ready the steak
13. Ball! now throw me
14. (Investigator) Where do we put the helicopter?
 - Bring the truck.
 (Investigator) In the truck, ok.

As I stated earlier, these utterances derive presumably from constructions in French involving dislocation. Predicate - subject patterns reflect French PRO - ETRE - PRED. + Ca (e.g., c'est mon nom, ça); verb - subject patterns reflect PRO - VERB + NP

(e.g., *il va, le train*). Both construction types place the new information contained in the predicate or verb initially followed by the referential NP.

Examples (6), (13) and (14) do not appear to conform to these models, however, since the most informative elements in these utterances are me and truck. Example (12) was uttered in a dispute over who would play the part of the doctor. In (13) Marc announces that it is his turn to throw the ball after another child had thrown it first. Finally, in example (14) it is clear that the exchange is about the helicopter and its location. The new information is the identity of the location.

There is one further point to be noted about these three examples. While example (6) can also be related quite readily to French L1 (i.e. le docteur, c'est moi) this does not appear to be the case for examples (13) and 14). However, it will be recalled that the premise of this paper was that the transfer of VS and predicate - subject patterns from French is pragmatically motivated. That is, these sequences are generated by grammars whose pragmatic component generates topic - comment structures. Topics may occur as afterthoughts and this, it was proposed, represents a developmental extension of the encoding of the most informative element of a referential situation in one-word utterances. Examples (13) and (14) conform to a more adultlike usage of topic - comment constructions in the sense that the given or presupposed information is in utterance-initial position and the new information is sentence-final. There are other examples in the data which reveal a similar topic - comment order:

15. /vuvu/...put there
'the dog, I put it here'
16. those there...baby have
'those there, the baby shall/can have them'
17. soup...give it to baby
'this soup...I will give it to the baby'
18. pussy...lay down there
'the pussy, it will lie down there'

Space does not permit a detailed analysis of these topic - comment structures and this will be dealt with elsewhere. It should however be pointed out that these topic - comment structures are fairly complex. In adult grammar terms the comment part can be rewritten as predicate (e.g., ready, my nom), as predicate phrase (played in the bed, goes), and as sentence (throw me, bring truck). A more economical and definitely more powerful solution would be to rewrite all comments as SENTENCE with the topic being coreferential with a constituent of the comment which may or may not be deleted. This would in fact make the underlying structure of these topic - comment constructions very similar to topicalization processes with right and left dislocation in adult English and French. The disadvantage to this proposal of rewriting the comment as SENTENCE is that it imposes the topicalization process on a subject - predicate phrase grammar. The argument being advanced here is that topic - comment constructions are a developmentally earlier form of linguistic organization. (Note that this

difficulty would not arise if the comment part was recursive so that it too would generate topic - comment constructions.)

What evidence do we find in the data to support the view that these topic - comment constructions are precursors to a subject - predicate phrase grammar?

We will take it as axiomatic that a subject - predicate phrase grammar possesses an autonomous level of syntax in which the occurrence of major sentence categories like subject and object in the phrase structure rules of the grammar is not sensitive to pragmatic constraints that inhere in the discourse situation. In the data of the three youngest children the occurrence of subject and object does however seem to be governed by pragmatic considerations. Consider, for example this bilingual exchange between Michelle and the investigator:

Michelle: Faire.

Investigator: What do you want to do?

Michelle: Faire bonhomme.

Here is another piece of discourse in which the object NP is variable:

Michelle: Moi va faire dessin.

Me faire.

Examples such as these could be multiplied. They illustrate the pragmatic constraints that operate in the realization or omission of major sentence categories.

4. CONCLUSION. We are now in a position to return to the question posed at the beginning of this paper: why do children five years and older learning French L2 not produce VS structures, and why do French-speaking children learning English L2 not transfer the positional order of stressed forms of surface structures with right dislocation once they are beyond the age 3-4 watershed. We have argued that these non-standard orders represent topic - comment structures generated by the pragmatic component. This pragmatic component is relatively unconstrained in that it permits the variable generation of sentence categories like subject and object in response to the informational structure of a communicative situation. If, however, pragmatic constraints can make the subject and the object optional, then we have no basis for attributing a subject - predicate phrase relationship nor a verb phrase category to these (production) grammars. More generally, syntactic constraints will be underdeveloped. Now as far as the stabilization of word order in French L1 acquisition is concerned, both Gregoire and Lightbown draw attention to the importance of verb - object constructions as a stabilizing influence. One can propose, therefore, that so long as pragmatic aspects override syntactic constraints, the positional conflict between SV~VS and VO~VS is not experienced as a structural conflict.

The pragmatic framework which has allowed us to account for the non-standard word order in the English L2 speech of very young French-speaking learners also permits us to assess the nature of the linguistic knowledge the L2 learner beyond age 3-4 has available for the acquisition task. He has internalized the notion of obligatory occurrence as defined by an abstract level of syntax. Without committing ourselves to the universality of the subject - predicate relationship, let us say that a learner whose L1 is not a topic-prominent language will also approach the L2 learning task with a subject - predicate phrase grammar. Such an abstract transfer base would permit a learner acquiring French to register the structural conflict between SV, VO, and SVO, on the one hand, and (apparent) VS sequences on the other. Hence even though his knowledge of the specifics of French syntax is not any more sophisticated than that of a two-and-a-half year-old French L1 learner, he would not be led astray by misleading models involving right dislocation.

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