15 The Variationist Approach toward Discourse Structural Effects and Sociointeractional Dynamics

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0 Introduction

Sociolinguists tend to focus on spontaneous speech used in ordinary conversational situations. The variationist approach to sociolinguistics involves open-ended procedures to obtain representative and comparable data, which contrasts with principles of control and predictability in other experimental-evaluative approaches (see Sankoff 1989 for more details). The variationist method relies on quantitative analysis to validate interpretations of the data. The purpose of the quantitative method is to highlight the sociocultural meaning of linguistic variation and the nature of the relationships among the linguistic aspects in probabilistic terms. The use of quantitative analysis is not a minor methodological detail. It provides a more accurate understanding of the usage and the frequency of the forms within the community as well as a way of detecting linguistic change. The frequency of forms and speakers' preferences give a more realistic overview of the usage of linguistic structures. More importantly, statistical tools allow us to pinpoint the social and linguistic conditioning as well as the tendencies and regularities within the linguistic system. Being a more objective and accurate basis of analysis than intuitions and judgments of value, the quantitative method is a powerful and efficient tool.

Sociolinguists view discourse as the product of a specific verbal interaction resulting from a set of choices vis-à-vis the set of all the potential choices within a language. Discursive competence implies the knowledge of linguistic forms, the context within which they might be used, and the sociolinguistic circumstances which permit them to be realized; these circumstances include the conceptual universe of the speakers, their sociocultural characteristics, and the interactional strategies between speakers.

Several analysts (Labov 1978; Lavandera 1978; Dines 1980; Romaine 1981; Thibault 1982; Weiner and Labov 1983; Vincent 1983, 1986; Horvath 1985; Dubois 1992) have identified five characteristics of variation analysis within discourse. First, discourse

variables involve a finite number of discrete variants, independent and autonomous, which do not form part of a continuum of surface realizations, but are related to each other only by their identical function. Second, it is not feasible to contrast the presence of a discourse form to its absence as is done in phonological studies. The linguistic context where the form will appear cannot be anticipated even though it is possible to characterize some linguistic contexts that favor its usage. Third, substitutions among the different manifestations of most discourse processes have consequences at several linguistic levels (pragmatic, interactional, etc.). Fourth, we cannot delimit and define in advance the set of different discourse functions. In addition, discourse forms are structurally diverse and can occur at distinct levels of analysis; they can be complex processes (narration, description, argument), large units (repetition, rhetorical questions, reported speech), or more circumscribed forms (markers and particles). Fifth, the discourse variable has in general a large number of variants (different forms) and, in consequence, requires a more complex quantitative treatment than the usual variable rule method elaborated for binomial variants (Dubois and Sankoff 1997).

Sociolinguists argue that the only way to access the multidimensional scoop of discourse structure is: (1) to adopt a quantitative procedure which respects the principle of accountability; (2) to recognize the various levels of analysis and to integrate them into the observation and analysis of the distribution of a discourse form; (3) to focus the analysis on the conditioning that holds among the multiple linguistic levels (structural, referential, pragmatic, interactional, social, etc.) that form the canvas of discourse process; and (4) to highlight the polyvalent associations (the co-occurrences) between the components of a discourse structure at its various linguistic levels.

0.1 The holistic understanding of the discourse system

The goal of the variationist approach is to highlight the "potential of signification of discourse" (term used by Halliday 1978), that is, the different levels of meaning which are intertwined to create discourse. Four general principles are representative of this framework:

- 1 *The specific conditions of oral speech*: The segmentation of oral speech based on the concept of the sentence as it is formulated for written speech is inappropriate (Blanche-Benveniste and Jeanjean 1987: 89). The identification of a discourse process must take into account the specific conditions of formation of oral speech.
- 2 The type of corpus: Factors taken into account in the study of a discourse structure within a specific corpus might not be applicable or relevant to or significant in another type of corpus. Consequently, the selection and the nature of the factors or linguistic levels, which may influence the occurence of a discourse structure, are constrained and valid to a single corpus.
- 3 The identification of the significant levels conditioning a discourse process: There are many levels on which discourse is organized. The important point is that the number and the type of levels are not fixed: they vary according to the object of study, the corpus, the type of linguistic data (political speech, interaction among friends, reporter-type interview) and the observed material (written or oral discourse).

The division into two or more is a conceptual distinction, which presupposes that all the levels participate in the creation of a discourse process, and are dependent

The dynamic nature of discourse: In examining the discourse system, sociolinguists aim at understanding the dynamic interaction between the different levels of signification constituting the discourse system. All levels are intertwined and interact with each other, but they all can be theoretically classified into categories. The conceptual division aims at identifying where, when, and how each level participates in the organization of a discourse form.

The variationist approach is not without difficulties. The definition and the delimitation of a discourse object – that is, the distinction of what is inherent in this object (the definition) and what constitutes the strategies of support or the variable environment of this object (the groups of factors) - itself represents a difficult task. The analyst must deal with numerous and extremely varied groups of factors. Their study requires different scientific competences; spotting all of them is not evident and is a tedious task. More importantly, their study requires linguistic intuition and good comprehension of discourse organization. Moreover, the systematic analysis of all the relations between groups of factors and the verification of the associations detected oblige the researcher to manipulate a lot of data and evaluate the significance of many statistical quantities, which requires care, energy, and critical judgment.

Nevertheless, the solid scientific basis of the empirical procedure as well as the quantitative method transcend these difficulties. The representation of a given discourse process in its multidimensional aspects, rather than as an inventory of its forms, allows us to unveil the network of associations between different factors which influence the construction of such a process.

The rest of this chapter is divided into two parts. In the following section, we set out the formal criteria and discourse roles that characterize the enumerative process in the spoken language. These provide the operational basis for the collection of data on several thousand tokens of enumeration. We present a variety of structural factors - the number of components; their syntactic nature; the use of coordinating markers and of the processes of repetition, reduction and expansion - which are among the most salient aspects of variation within the structure of enumeration. We intend to show that these processes do not, however, vary completely independently, but in a patterned way, and this patterning should reveal much about functional constraints on the construction of enumerative expressions by speakers.

The second part of the chapter deals with the stylistic dimension that accounts for the considerable variation among speakers in the overall use of enumeration. Stylistic factors are not as regularly employed as sociodemographic factors in quantitative studies, partly because stylistic distinctions are not directly accessible to objective approaches, and because variation along the stylistic dimension generally seems to parallel that along some social parameter. However, there has recently been much debate over the direction and extent of variation due to stylistic or interactional parameters in general versus the analogous effects of age, sex, and class.² Rickford and McNair-Knox (1994) emphasize the importance of empirical testing of hypotheses and the predictions of certain models of stylistic variation, such as the audience design

model of Bell (1984) and the communication accommodation model of Coupland and Giles (1988). Rickford and McNair-Knox also note that the quantitative study of style in sociolinguistics adds an important perspective. Combined with social aspects (age, sex, race, etc.) and with internal linguistic conditioning, the quantitative study of stylistic variation gives rise to a range of intriguing problems in sociolinguistics. It helps distinguish between the effects of internal constraints (linguistic factors) and external constraints (social and stylistic dimensions), and to assess the independence of the latter. In order to determine whether enumeration in spontaneous discourse exemplifies the kind of stylistic observations found to be recurrent in sociolinguistics by Finegan and Biber (1994), we compare and contrast social and stylistic conditioning on the use of enumeration.

1 Enumeration as a Discourse Strategy

Studies of figures of speech have been limited in traditional rhetoric, as well as in stylistics and in modern literary fields, because analysts have confined their role to exceptional, ornamental uses. Because they generally pick only one or a few striking examples to illustrate their points, they have tended to underestimate the regular, routine use of these figures; this is true even in literary studies. While enumeration as a figure of speech has engrossed rhetoricians since classical times, as well as modern text analysts, little attention has been paid to it in spoken discourse. Enumeration is a frequently used discourse strategy – in compiling shopping lists, in presenting evidence in an argument, in counting one's blessings, in comparing costs and benefits - and its use in oral interaction differs considerably from its role in the written language (Gilbert 1989). Because it is made up of, or overlaps with, numerous other linguistic processes, enumeration has not usually been studied for its own sake, but rather in terms of related topics: repetition, structural parallelism, semantic progression. As an example, Schiffrin (1987) and Jefferson (1990) discuss lists, a distinct type of construction, though overlapping to a considerable extent with enumeration.

Enumeration is a complex process, combining a variable number of different structural components of the same type to evoke a single, more general, referent. It is a rhetorical device in French as well as in other languages which have received less attention. With some effort it can be operationally identified and isolated in a text (see Dubois 1995 for more detail). Enumeration represents a cumulative discursive procedure made up of at least two different components that belong to the same or equivalent morphological and functional categories. This procedure evokes a homogeneous referential ensemble to which the enumerated constituents refer. The surprising variety, not only of types of enumeration but also of syntactic and discursive procedures used in their elaboration, is of particular interest in the enumerative procedure. Examples (a) and (b) correspond well to the intuitive notion of enumeration as the sequential naming of the elements of some set. In assembling our data set, however, it became clear that referential and syntactically more complex constructions like examples (c), (d), and (e) should also be included:

(1) Examples of enumeration encountered in the corpus³

- a. 1. Okay then: your family, your children do they live near here?
 - 2. No, my children . . .
 my daughter lives in
 Snowdon (yes)
 one of my sons lives in
 Repentigny
 the other lives in . . . well,
 since this morning, in
 Boucherville (ah ah)
 and the third is in La-Cité
 (uh-huh)
- b. She's got a title, she might make ... I don't know, twenty-five cents more than the other, but she's got all the responsibilities.
 Open the shop close the shop (uh-huh) cash-receiving all of that taking stock shipments then ... Because I have a friend like that (uh-huh)
- c. So the principles of life haven't changed. There has been no evolution in that. <humhum> The idiots we've had some we will have some and then we'll have some more and there will always be some
- d. Everybody in the hall. "I salute the flag." And the principal reads the prize-winners, and this and that <y yes yes> Finally it's time to salute the flag, the brigadiers in front the white belt the flag carrier the first in the class

- 1. OK puis: c'est ça: Votre famille vos enfants est-ce-qu'ils habitent pas loin d'ici?
- 2. Non mes enfants:

 ma fille habite à Snowdon <oui>
 un autre de mes fils habite à
 Repentigny
 l'autre habite à: bien depuis ce
 matin à Boucherville <ah ah>
 et le troisième est à La-Cité
 <humhum> (79:3)

Il lui donne un titre, elle a peut-être: je sais pas moi vingt-cinq cents de plus' que l'autre mais elle a toutes les responsabilités.

Ouvrir la porte fermer la porte <humhum> le cash receiving tout' ça là recevoir le stock puis: Parce-que j'ai une amie comme ça <humhum> (7:56)

Fait-que donc les principes de vie ont pas changé. Il y a eu aucune évolution là-dedans. <humhum> Des idiots tu en as eus, tu vas en avoir puis tu vas en avoir encore puis il y en aura tout le temps (2-84:18)

Tout le monde dans la salle. "Je te salue ô drapeau." Puis le principal lit des mentions puis ci, puis ça. <oui oui oui> Là un moment donné c'est le salut au drapeau, les brigadiers en avant la ceinture blanche le porte-drapeau le premier de classe

the second and the third in the class the Quebec one the American one. Fantastic. The Canadian one in the middle. You get the picture? <yes (laughs)> Good, perfect. The girls on one side, the guys on the other.

I mean [language] it's probably not important when you go to work in a factory, I don't think it's very important. <humhum> When you're a doctor really I am not even sure it's important. But when you're a lawyer, then it surely is. <humhum> When you're a journalist, then it surely is. When you're a university professor, then it is. <yes yes yes> Yes yes.

le deuxième puis le troisième de classe celui du Québec celui des Etats-Unis. Fantastique. Celui du Canada dans le milieu. Tu vois la scène? <oui (rire)> Bon, parfait. Les filles sur un bord, les gars sur l'autre. (2-84:51)

Je veux dire [la langue] c'est probablement pas important quand tu t'en vas travailler dans une usine, je pense pas que ça soit bien important. <humhum> Quand tu es médecin à la rigueur je suis même pas sûr c'est important. Mais quand tu es-t-avocat ce l'est sûrement. <humhum> Quand tu es journaliste ce l'est sûrement. Quand tu es professeur d'université ce l'est. <oui oui oui> Oui oui. (117-84:43)

We used the following operational criteria to identify enumerations:

- There must be at least two components. Traditionally three have been required, but we also accepted just two when they are followed by an "extension particle" (Dubois 1992). Look at the second sequence in example (c), where we find puis, etc. There were more than 400 enumerations with two components, 2000 with three components, and 900 with four or more, to a maximum of 17.
- 2 Each component must constitute an autonomous prosodic and syntactic unit, and they cannot simply be repeated items with the same referent.
- 3 The components are linked in a coordinate structure, either explicitly (by a conjunction) or implicitly.
- The components have identical functional roles. They are subjects of the same verb, adjectives qualifying the same noun, subordinate clauses attached to the same noun or the same verb, a series of independent sentences, etc.
- They have morphological equivalence. Though the components are not constrained to be in exactly the same word class, they must be paradigmatically substitutable from the syntactic viewpoint.
- 6 The components of the enumeration together evoke some larger set of which they are part and which is larger than any one of them.
- They have prosodic coherence. The same rhythmic value is assigned to each component that distinguishes the enumerative sequence from its general context.

2 Data and Methodology

The 1984 Montréal corpus serves as database for our study of enumeration. Composed of 72 semiclosed interviews, this corpus is a continuation of the Sankoff–Cedergren corpus completed in 1971. It contains 60 interviews with speakers in 1971 and 12 interviews with speakers aged 15–20 (to represent a new cohort of young speakers). On average, each interview included 1.5 hours of conversation, usually recorded in the informant's home. The interviewers were directed to create a climate conducive to informal conversation and to elicit the most discourse possible from the informant (Thibault and Vincent 1990: 46).

In total, we collected 3464 enumerations in the corpus. All speakers use the enumerative procedure, but to varying degrees; we find 12–156 enumerations per interview. No social factor influences the overall rate of use of enumeration. General use of enumerations neither rises nor falls with the age of the speaker. Women and men use it in similar ways and the socioprofessional code assigned to speakers does not affect the overall use of enumeration. To measure the association between aspects of the interactional context of enumeration and its properties at the structural, referential, and discourse levels, we used a systematic protocol for generating and evaluating large numbers of cross-tabulations of two or three variables. To analyze the social effects on these same properties, we used GoldVarb, a logistic regression package.

The interview is divided into two parts, each corresponding to a specific interactional dynamic. Open questions dealing with such themes as residence, occupation, education, and language constitute the first part, henceforth called the interview. The goal was largely to stimulate as much natural, uninterrupted discourse as possible. A closed (more or less) questionnaire on tastes and consumer habits represents the second part, which was designed to probe a more specific set of attitudes, customs, and experiences. In the corpus, there are not (properly speaking) two separate communication events: it is the same interview, and the interviewer and the roles (interviewer and informant) do not change. However, the use of two questionnaires modifies the dynamic of the interviews. The distinction between the general interview and the questionnaire is one of style, or more precisely of discourse elicitation, although this stylistic differentiation is weaker than that provoked by two very different communication events (e.g. at home, in public).

The distribution of the enumerations within the interviews is not affected by the subject matter. On the other hand, the use of enumeration is very sensitive to the two interactional dynamics set in place by the interviewer: one in the general interview and the other in a questionnaire. It was the latter that provoked the greater production of enumeration. The nature of some of the questions in the questionnaire partially explains this high frequency of occurence. Specific questions, such as "Do you read the newspaper?," "Which one?," "Do you play games or sports?," "Which ones?," "Do you go see shows?," "What kind?," implicitly assume more than one newspaper, more than one game, and more than one kind of show.

The two interactional dynamics also lead to enumerations that tend to have somewhat different properties at all levels of analysis. Distinctions between them on the interactional level are summarized in table 15.1.

Enumerations in general interview	Enumerations in questionnaire
+ monologic section	+ dialogic section (+ back-channel)
+ indirect orientation	+ direct orientation

Table 15.1 Summary of relations on the interactional level

The enumerations produced in the interview tend not to be directly elicited by the interviewer, and to be in more monologic discourse. Enumerations collected in the questionnaire tend to occur in more dialogic discourse, as part of an immediate answer to the interviewer, who accompanies their production with back-channel signals.

In this chapter, we will discuss only the most salient linguistic aspects of the construction of multiple forms of enumeration.

In first place is the length of the enumeration:

- The number of enumerated constituents (elements), which varies from two to seventeen in speech.
- 2 Enumeration composed of complete sentences (SVO) is distinguished from that composed of sentence fragments (for example an enumeration of adjectivals).
- Third is the specific experience of the informant, including autobiographical observations and the experience of his or her friends and relations, and the general experience of the world.
- Following this is the particular functional organization of the enumeration (schemas: that of synonymous or antonymous value versus that of sets), particularly the inventory or the list of heterogeneous elements, in which several distinct elements are concatenated to evoke the entirety of the set.
- Enumerations are sometimes anchored in the discourse by an opening theme (produced by the interviewer or the speaker) which does not participate in the specific structure of the enumeration but which is instead an optional part of its general structure.
- The enumeration may have an informative function, or it may play a persuasive role such as justification, illustration, counterargument, etc.

Structural Effects on Enumeration 3

Enumerations are used to evoke some set larger than any of the components and generally larger than all of them put together. The expressive potential of this device is thus very great, but its use entails a number of potential problems of processing for the speaker and of interpretation for the hearer. The concatenation of several syntactically homologous components in a slot that ordinarily contains just one item may disrupt the expected sequence of categories for the hearer. An enumeration entails a longer delay than usual between the part of the sentence or utterance preceding it and that following it, possibly creating problems for both the speaker and hearer. For the speaker, the condition of equivalent categories may be too constraining and too time-consuming, but for the hearer it may be essential for decoding. Summarizing, the cross-cutting pressures on enumerations that may account for their variability, then, are of three different types, which we operationalize as follows:

- 1 Expressivity: The more components there are, the more there is in each component, and the more different the content of each component, the more the expressive potential of the enumeration.
- 2 *Processing:* The more components there are, the more there is in each component, and the more different the content of each component, the greater the processing difficulty. Conversely, the shorter the enumeration, the shorter the components, and the more parallel the components are, the easier the enumeration is to process.
- 3 Length: The shorter the enumeration, the shorter the components are, the more efficient is the use of enumeration in carrying out its function. Parallelism of components is redundant and represents a decrease of efficiency.

Of course, we have greatly oversimplified these considerations (see Slobin's 1977 charges to performance). They may not apply in particular instances, but simply represent hypotheses about statistical tendencies.

The linguistic structure of the enumerative expression and of its individual components referring to a set of elements is quite variable, as can be seen in the examples. The first of the structural factor groups to be examined is simply the number of components in the enumerative sequence. Example (b) has four components, example (d) has eleven. According to our operational criteria, it is clear that increasing the number of components in an enumeration allows for greater expressivity but is costly in terms both of communicative efficiency and of processing.

The second factor, that of component complexity, contrasts enumeration via independent propositions with the situation where the components constitute a part of a sentence. We also distinguish a category of dislocated, independent, or detached units that are associated with a sentence but do not form part of the basic sentence matrix. Increasing complexity should allow for increased expressivity but cause increased processing costs and decreased efficiency, much as increasing the number of components does.

When the third, fourth, etc. component shows an ellipsis of an element that "should have" appeared by analogy with the first two components, the enumeration was coded as "reduced." Example (d) shows several degrees of reduction. Inversely, when lexical elements are added to the purely paradigmatic content of the second or later component, this was coded as "expanded." The sixth component in example (d) is expanded.

Both reduction and expansion decrease the homology among components and hence could increase the difficulty for the hearer of recognizing that the enumerative procedure has been used. With respect to efficiency, the two processes should have opposite effects, reduction increasing it and expansion impeding it. In addition, expansion definitely should allow for increased expressivity.

For the fifth factor group, enumerations where some elements are repeated in at least two components were coded as such (e.g. example c). This was a widespread feature in the data. Repetition results in increased parallelism among components and hence should decrease processing difficulties while also decreasing efficiency.

The sixth aspect of enumeration that we coded was the use of explicit markers to indicate the coordination of components and their integration into the linear sequence. Thus, markers decrease processing difficulties while decreasing efficiency by adding additional material to the utterance. In the written language, by far the most common pattern is the presence of a conjunction between the penultimate and the final components of an enumeration. In the spoken language, in stark contrast, almost half of the enumerations simply concatenate the components without any explicit marker.

Table 15.2 summarizes the hypothesized effect of each of the parameters on processing difficulties, expressivity, and efficiency.

Parameters	Processing ease	Expressivity	Efficiency
Number of components	_	+	_
Complexity	_	+	_
Reduction	_		+
Expansion	_	+	_
Repetition	+		_
Markers	+		_

Table 15.2 Hypothesized effects of parameters on use of enumeration

The empirical relationships among the six factor groups as found by the detailed statistical analysis described in Dubois (1995) are summarized in figure 15.1. The strength of the relationship between number of components and complexity is somewhat surprising; from table 15.2 it might have been expected that as the number of components increased, the complexity of each one would *decrease* to compensate, from both processing and efficiency viewpoints. That this is not the case casts doubts on our initial hypotheses about the processing difficulties associated with these two parameters, or else the increase in expressivity outweighs the processing and efficiency costs.

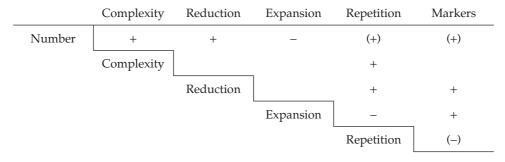


Figure 15.1 Correlation among six factor groups

The connections between number of components and reduction and expansion are both compatible with the criterion of efficiency, but only the decrease in expansion conforms to expectations according to processing difficulties. The divergent behavior of expansion and reduction reflects the requirements for efficiency and not processing.

Expansion and repetition both reduce efficiency, while reduction and repetition compensate. Finally, the use of markers in the presence of reduction and expansion compensates for the processing difficulties due to the loss of parallelism between components. This is not necessary in the case of repetition since the latter actually increases this parallelism.

The associations summarized in figure 15.1 lead us to conclude that marking and repetition do indeed play a role in reducing potential processing difficulties, especially those due to lack of parallelism within components introduced by reduction and expansion. On the other hand, the increase in processing difficulties we hypothesized due to the number of components in an enumeration and the complexity of these components are either nonexistent or completely outweighed by the increased expressivity obtained.

4 Interactional and Social Effects on Enumeration

The interactional situation (general interview versus questionnaire) conditions properties of enumeration on the referential, discourse, and structural levels,⁴ producing two sets of enumeration which show clearly divergent tendencies, as summarized in table 15.3.

Although no social factor influences the overall rate of enumerations in the interviews within the corpus, several linguistic aspects are tied to age (table 15.4).

The youngest in the corpus (15–33) exhibit a greater number of their enumerations in the questionnaire. Conversely, older speakers (34+) more often elaborate their enumerations within the general interview.⁵ Why do the younger speakers produce enumerations: (1) in a context in which the interviewer intervenes strongly (questionnaire, dialogic discourse, direct orientation, or expressly as an interviewer); (2) putting their personal experience into play in the form of a list (biography/others, specific

Table 15.3	Properties	of two set	ts of enumerations
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General interview	Questionnaire
Referential:	Referential:
++ things/objects, general experience	++ biographical
++ synonymy (antonymy), gradation	++ inventories
Discourse:	Discourse:
++ argumentative function	++ informative function
$++ \varnothing OT$ or $+ OT$ from informant	++ OT from interviewer
Structural:	Structural:
+ or – partial sentences	++ full sentences

Notes: ++ indicates strong associations (binary factors co-occurring less than 40 percent or more than 60 percent of the time.)

⁺ represents weaker relations (factors co-occurring between 40 percent and 60 percent of the time). OT = opening theme of an enumeration, e.g. "Do you eat any particular fruits?"

Table 15.4 Effects of social factors on properties of enumerations

Younger speakers (33–): *Older speakers* (34+): ++ interview ++ questionnaire ++ biographical + ref. things/objects, general experience + inventory of the world ++ informative function + synonymy (antonymy) + argumentative function ++ OT from interviewer Middle class: Working class: + parts of sentences + full sentences

Notes: All indicated relations are significant with p < 0.001. See notes to table 15.3 for key to symbols.

framework, inventory); (3) as an informative function of which the thematic ensemble is put into perspective by an announced theme? We do not pretend to have a simple response, as several social phenomena contribute. Nevertheless, certain facts can explain the observed tendencies.

First, more or less experience in diverse formal situations (the sociolinguistic interview being a more formal situation than a family discussion) partially explains the behavioral differences between younger and older speakers. In the question-naire, the interviewer is more visible. She or he poses a series of questions designed to promote the formation of enumeration, as we pointed out previously. Younger speakers, more than older, use enumeration to replace the interactive task requested by the interviewer. Also, younger speakers are particularly sensitive to the interactional behavior of the interviewer. Among other things, they let the interviewer decide the themes of their enumerations. The interactional behavior of the interviewer has repercussions on the referential and discursive organization of enumerations of young speakers: they hold more strongly to their personal experience and generalize it less, contenting themselves with informing the interviewer on their own lives. They assign greater importance to enumeration in a dialogic discourse of an informative nature.

In the interview, an interactional dynamic in which the interviewer grants more freedom to the speaker and poses more general questions, younger speakers use enumeration less but older speakers use it more. We can explain the particular behavior of older speakers by the fact that they possibly associate use of enumeration with a more formal or educational task less than do younger speakers. They enumerate little when the interviewer's questions lend themselves to it and distance themselves from the linguistic behavior of the interviewer. However, this does not explain why they enumerate more in the interview. There is certainly an interactional process underlying the behavior of older speakers, but it is more implicit and diffuse than that within the questionnaire.

The age of the interviewers may also play a role, even though one group of informants (15–20 years old) was younger than the interviewers. Although the authors of the corpus attempted to minimize the role of the interviewer, clear behavioral

differences between younger and older speakers remain. Still, all younger speakers do not let themselves be continuously guided by the interviewer. For example, one young speaker takes control of the interview for granted. At this point, it is the relations of authority or solidarity which are established between the speaker and the interviewer, rather than the repercussions of the role of the interviewer, that explain the different behaviors.

Four Recurrent Observations and the Case of Enumeration

In examining the results in tables 15.3 and 15.4, we may discuss the validity, for enumeration, of the four observations considered to be recurrent in sociolinguistics according to Finegan and Biber (1994):

- Social and stylistic factors influence the usage of linguistic processes.
- 2 The type of linguistic variation influenced by stylistic factors is parallel to that of social factors.
- 3 Certain interactional situations (generally more formal) present a more frequent usage of elaborated forms, while other situations (generally more informal) contain a greater utilization of reduced forms.
- 4 Speakers of higher social class show a proportionally more important usage of elaborated forms, while speakers of lower social class tend to use a greater number of reduced forms.

Both social factors and the interactional dynamic influence the formation of enumeration, which constitutes another instance of observation (1), leaving aside for the moment the nature of the link between the two extralinguistic aspects.

The interaction situation does not influence exactly the same linguistic factors as do age or social class, though some parallelism can be seen between social and interactional effects on enumeration; an observation of type (2). For example, although the situation has no effects on complexity, this property is clearly linked to the social dimension. The use of the inventory schema, while influenced somewhat by the interaction situation, is subject to the effects of age, but not class. Although the associations are weak, we do find one property, complexity, that is conditioned by SP class and not by age (an effect verified by other statistical analyses). In our opinion, this fact is explained in terms of priorities by the absence of ties between interaction and the structure of the enumerations. As we have seen, while the effect of age is mediated by interactional factors, that of class is not. Structural variation in enumeration results from a real sociological effect and, contrary to discursive and referential variation, it is relatively free from what happens on the interactional level. In other words, it is not the informants' reaction to the type of interaction which determines the structure of the enumeration, but the SP class as an individual characteristic.

Contrary to observation (2) (the parallelism pattern), we have thus documented three types of extralinguistic effects on the properties of enumeration:

- 1 Some properties are influenced by interactional and social effects together.
- 2 Some factors are exclusively influenced by the social dimension (only SP class has an incidence upon structure properties).
- 3 Some factors are linked solely or largely to the interactional dynamic. For example, the total number of enumerations is directly influenced only by the interview situation, and the effects of the interview situation on the choice of schema (inventory versus synonymy or gradation) and the type of referent (evaluation, things, etc.) of the enumeration clearly dominate those of age.

These last effects run counter also to the prediction of Bell's (1984) model. He contends that certain linguistic processes are subject to social and stylistic effects, others only to social effects, but none is influenced solely by stylistic effects. Moreover, he adds, the degree of stylistic variation does not exceed the degree of social variation (Bell 1984: 152). How can we explain the origin and dominance of stylistic effects on certain aspects of enumeration?

Interactional factors capable of influencing the production of a process are numerous, quite different (some govern interactional organization, while others participate in its implementation), and linked to thematic and pragmatic aspects. Some of the relations between interactional factors and properties of discourse are predetermined by the nature of the interview situation itself (such as subjects broached or the choice of interviewer), being the interactional organization within which the participants agree to act. This is inescapable; each speaker has to respond to questions either from the general interview or from the questionnaire. Language phenomena influenced by personal and social characteristics of the participants may or may not occur within the questionnaire or the interview, but the contrasting interaction situations are both imposed, so whatever influence they have must always occur in each interview. On the other hand, the variable number and the formulation of questions (other than those determined by inquiry methodology), the emission of back-channel signals, and the mode of discourse (monologic or dialogic) of the speaker represent aspects of the implementation of the interaction. Social factors such as age, sex, ethnicity, etc. of the speaker or of the interviewer can constrain linguistic variation and dominate stylistic effects (Dubois and Horvath 1992, 1993).6

Bell's hypothesis about the dominance of social factors holds up better when the properties being influenced are involved in the implementation of the interaction, while stylistic effects can surpass social effects when the former govern the organization of interaction. Since stylistic factors have a different impact on linguistic variation at various levels (e.g. structural, referential, discourse organization), then their relation to social effect can also differ: stylistic effects can be exclusive, dominant, or parallel to social effects. Bell's model does not take into account the dominance or exclusivity of stylistic effects, since he considers the way factors act only on one level, namely structural.

In Finegan and Biber's observation (3), determining what is reduced or elaborated poses a problem in discourse, since the use of a discourse strategy is not opposed to its "nonuse." Nevertheless, from the specific point of view of structure, it may be considered that an enumeration of complete sentences is more elaborate than an enumeration of words, and that an enumeration of three constituents is reduced in comparison to another of five constituents. As an instance of observation (3),

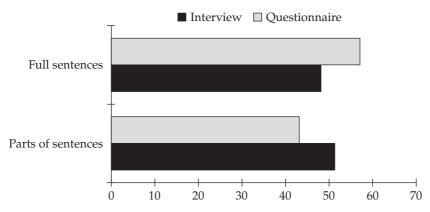


Figure 15.2 Percentage of enumerations composed of full sentences and parts of sentences within the general interview and the questionnaire

elaborated enumerations – namely more constituents and more full sentences – are frequently produced in the (formal) questionnaire, while more reduced ones are more frequent in the general interview (figure 15.2).

However, the type of interactional behavior imposed by the interviewer determines a greater or lesser elaboration of the enumeration than does the type of formality (in terms of theme) in the interview. Given that use of a questionnaire generally favours a dialogic discourse, use of back-channel signals and theme questions ("What are your favorite restaurants?") favorable to enumeration, it is not surprising that construction of these enumerations differs from those found in the general interview. Nonetheless, how is it that the greater presence of the interviewer prods the speaker to pad out his or her enumeration with a larger number of constituents?

The presence of a specific theme question of the interviewer, which often becomes the OT (opening theme) of an enumeration, can be interpreted as a mark of authorization. The OT of the interviewer (like the use of back-channel signals) explicitly legitimizes the construction of the enumeration which the speaker will produce, which in turn authorizes a more complex elaboration. Since the interviewer has predefined the thematic set to be evoked by the enumeration of some of its elements, the speaker must assure cohesion of enumerated elements as well as cohesion of all elements in accordance with the interviewer's request (while this is not obligatory for self-initiated enumerations). This is carried out by using a larger number of enumerated elements and elements of more complex structure.

Were an observation of Finegan and Biber's fourth type pertinent to enumeration, we would find more elaborated enumerations from speakers of higher SP class and more reduced enumerations in the discourse of speakers of lower SP class. However, it is the converse that is clearly supported by analysis. Speakers of higher social class show a proportionally greater use of reduced enumerations, while speakers of lower social class tend to use a greater number of elaborated enumerations (figure 15.3).

The link between complexity of enumerations and social class is better explained from the point of view of "discourse strategy" than, as contended by Finegan and Biber (1994), by greater or lesser access to a specific style by a social group. When speakers of disadvantaged SP utilize enumeration in a sociolinguistic interview, they

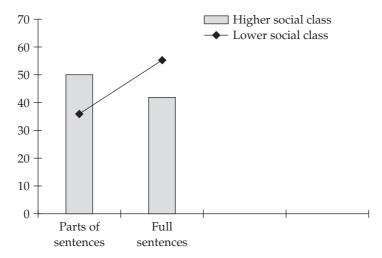


Figure 15.3 Percentage of enumerations composed of full or part sentences, by social class

make its use stand out more clearly, in structural terms, than do speakers of other SP classes. The fact that this social group favors the use of linguistic aspects causing a greater structural breadth (an enumeration that is longer and constituted of more structurally elaborated elements) does not signify that it prefers more complex enumerations in and of themselves, or that it is more able than another group to make use of this process.

There is no necessary link between the linguistic factors involved in the structural variation of a discourse process and the intrinsic complexity of that process, for two major reasons:

- 1 The structure of a discourse process is much more complex than the scope of observation (3), since that structure is linked to other aspects at different levels (referential, discourse, etc.).
- 2 Because of interactional laws (goals or maxims) that assure good transmission of the message and that govern all discourse (for example, it is impossible to enumerate indefinitely without incurring certain consequences), a balance exists among the processes that participate on the structural level. Thus, the use of a process which augments the structural complexity of a form (the length of an enumeration) counterbalances another one which reduces it (surface reduction of enumerated elements).

The greater the structural complexity of an enumeration (complete sentences), the more a part of the sentence is repeated in each sentence (and repetition diminishes complexity). Or, the smaller the complexity (enumeration of parts of sentences), the more certain enumerated elements benefit from a structural expansion (more complex) (figure 15.4). To sum up, a long enumeration of sentences of which a part is repeated has a degree of complexity equal to a short enumeration of words, interspersed with paraphrases designed to orient the listener, or to a long enumeration of subordinate clauses of which some undergo a surface reduction.

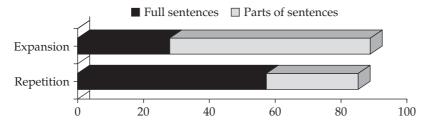


Figure 15.4 Percentage of expansion and repetition by structural complexity

Few analysts take into account the interrelation of structural and other factors in the construction of a form and of the balance of functions within discourse. We often see an oversimplified view of the frequently demonstrated association between social class and linguistic structure. It is difficult to contend that the link between these two aspects is summarized in the form of the following: higher class = elaborated structure, lower class = reduced structure. Observation (4), which in our context would see more elaborate discourse forms employed by speakers of higher SP than by speakers of lower SP, cannot be made for the phenomenon of enumeration.

6 Conclusion

We have demonstrated that there are three types of extralinguistic effects on the properties of enumeration: (1) some properties are influenced by interactional and social effects together; (2) some factors are exclusively influenced by the social dimension; and (3) some factors are linked solely or largely to the interactional dynamic.

Finegan and Biber (1994), unlike Bell (1984), hold that stylistic variation can prevail over social variation. They contend that the sociolinguistic methodology through which Bell examines the conditioning of linguistic variation prevents the discovery of the weight of stylistic effects. Contrary to what these authors hold, our results indicate that traditional sociolinguistic methodology can reveal the stylistic effects on variation in the same way as an analysis of different situations, although it is true that the number of stylistic factors taken into account in the corpus is lower than that of social factors. In other respects, according to Finegan and Biber (1994: 343), a stylistic analysis such as that of enumeration has no external validity and no empirical status, as it is not built on diverse situations or different interviewers. It is evident that stylistic variation that speakers show within a corpus constitutes only a part of their stylistic repertoire. Still, nothing assures us that interactional or social factors insignificant to enumeration will become significant in other situations.

For example, interactional level has little influence on the structure of enumerations (the interview situation has a weak effect on the complexity of enumerated elements but no effect on all the other structural factors that we analyzed, such as number of elements, repetition, markers, etc.). If we analyze the same procedure in diverse situations, it is possible that the structure will remain indifferent to all stylistic variation. We might also multiply the situations without interactional factors becoming influential. The results of our study are empirically valid in the sociolinguistic inquiry, but they may also be so for the ensemble of the stylistic repertoire of the speakers. The important point is to examine the effect of social and stylistic levels separately on factors that are implied in the production of a discursive procedure, and to take into account this vast network of linguistic and extralinguistic associations. Thus the analysis may determine whether one level (social or stylistic) explains the other's effects, and reveal the process of complex elaboration of the discourses.

Discourse analysis has traditionally focused on the study of individual examples to illuminate rather general and abstract principles about texts and interactions viewed holistically. In contrast, variationism depends on hundreds or thousands of tokens to prove rather circumscribed points about specific phonological or syntactic structures. While the scope of discourse analysis is broad, methodologically it does not search for reproducibility, objectivity, or even necessarily scholarly consensus. The opposite is true about variationism, where even proponents of opposite viewpoints can agree on the nature of the data and the validity of analytical procedures, but the investigation is confined to one issue within a single level of linguistic structure. Can we (and should we) hope to harness the methodological power of quantitative methodology in probing the richness of discourse, with its multiple facets spanning both structural and interactional relationships? We propose our study of enumeration as a prototype of an approach which succeeds in operationalizing discourse concepts on many levels, so that an exhaustive study of a large corpus can reveal and characterize with some precision the deep connections among the various processes implied in the motivation, construction, use, and interpretation of this figure. The keys to this approach include:

- 1 avoidance of one-dimensional, highly modular, or other oversimplified models of performance. What is needed is an eclectic and inclusive vision of what may be in play during a particular production, and an open-mindedness about what surface indications and what analytical interpretations are appropriate for coding the various aspects of a token.
- 2 taking seriously the principle of accountability. This involves willingness to undertake the tedious job of extracting and analyzing all the eligible examples in a corpus, and understanding that although every occurrence is different, they are comparable at many levels.
- 3 avoidance of highly parameterized and other restrictive statistical models for analyzing the data. What is needed is straightforward but systematic two-way and three-way assessments of association, at least as a first step.
- 4 a great deal of reflection in order to integrate the welter of results likely to emerge from such a study. A series of isolated correlations without any emergent framework is what gives quantitative studies a bad name. No analysis is complete without an understanding as coherent and elegant as the discourse phenomena themselves.

NOTES

- 1 For example, several researchers (Labov 1972, 1978; Linde and Labov 1974; Labov and Fanshel 1977; Labov and Waletsky 1967; Sacks et al. 1974; Tannen 1984, 1989; Bell 1984; Schiffrin 1994; Horvath 1997; Horvath and Eggins 1987; Dubois 1994, 1995, 1997; Dubois and Horvath 1992; Vincent and Dubois 1996, 1997; Dubois et al. 1995; Dubois and Sankoff 1994, 1997) have paid attention to the description of a number of high-level discourse structures (argumentative, informative, and narrative structures as well as reported speech, interruption, overlap, repetition, etc.) and their particularities. Others have concentrated on signals or local small units (markers and particles) which mark prospectively or retrospectively the linguistic or the interactional structure of discourse (Schiffrin 1987; Dines 1980; Laforest 1992, 1996; Vincent 1983; Vincent and Rains 1988; Vincent and Sankoff 1992; Vicher and Sankoff 1989; Dubois 1992; Dubois et al. 1995).
- 2 Atkinson and Biber (1994) give a systematic and detailed summary of empirical studies dealing with language style.
- 3 All constituents of the enumerations cited as examples are boldfaced and placed one after another so that each appears on a different line. Such a configuration lends more perspective to the constituents (or to internal

- movements of enumeration) and marks the enumeration of that which precedes or follows in the discursive context. I have respected the discritical marks and the punctuation used in the transcriptions of the interviews.
- We mentioned earlier that the situation or style influenced the choice of dialogic or monologic mode as well as the orientation of the enumerations. Mode and orientation also share all the associations between the interactional situation and the other parameters that it conditions. To avoid redundancy of results, only those of the interactional situation will be given, with the understanding that these associations are valid for the two other parameters as well.
- 5 If we take the interactional situation, in each SP class, younger speakers produce more enumerations in the questionnaire than do their elders. No matter what the age, informants of disadvantaged SP class will always have more enumerations in the questionnaire than other SP classes.
- 6 Dubois and Horvath (1992) measured the influence of interviewers in varying the ethnicity of the interviewees.

 Request strategies of Australian interviewers (number and formulation of questions that are unforeseen in the original questionnaire) are significantly different according to the addressee (Greek, Italian, or Australian).

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