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CHAPTER 2

A Cognitive View on Interlanguage Variability

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1. INTRODUCTION

In this chapter, I first examine Tarone's sociolinguistic approach to the study of interlanguage (IL) variability. I focus on Tarone's conception of the "vernacular style" as the speech style in which the speaker (L2 learner) pays least attention to language form. Tarone's approach is then contrasted with a cognitive, information-processing view on IL variability. I try to demonstrate how the two approaches can be combined so as to provide a more fruitful basis for research on second-language acquisition (SLA) processes. I then describe a study of my own, to illustrate two methodological points in the empirical study of IL variability concerning (1) the usefulness of pretest procedures to increase the chances that L2 learners will in fact exhibit variability in their IL performance, and (2) the importance of making a conceptual and empirical distinction between "task" and "task requirements."

2. AN INFORMATION-PROCESSING VIEW ON THE NOTION OF "VERNACULAR STYLE"

There is general agreement among authors of both sociolinguistic and psycholinguistic backgrounds that setting, task, and task requirements affect the degree of attention which language users pay to the formal correctness of lan-

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guage use. This attention to form is in turn thought to be responsible for the variability in their language production and comprehension (Dickerson, 1975; Ellis, 1985b; Gatbonton, 1978; Labov, 1970; Sato, 1985; Tarone, 1982). Some of these authors, most notably Tarone (1979, 1982, 1983, 1985, and Chapter 1, this volume), hold the view that this variability stems at least in part from a number of "styles." These styles can be located on a continuum, ranging from careful style to casual style, which Tarone refers to as vernacular. According to Tarone, this vernacular is the "basic," most "natural" style, occurring in informal communicative situations in which the language user pays least attention to form.

According to Tarone, the vernacular is primary in two senses. First, it is "primary in the sense of being most stable and consistent" (Tarone, 1983, p. 154). Second, it is primary in a developmental sense. This developmental primacy is a corollary of Tarone's assertion that her style continuum model allows for two means of IL internalization (1983, p. 155). In one, L2 learners spontaneously produce structures in their unattended speech (vernacular style). The other means of internalization manifests itself when learners adjust their production to the target norm. These adjustments appear first in careful style and spread from there to less formal styles until they show up in the vernacular. Thus, the primacy of the vernacular style in the developmental sense pertains to the claim that typical IL structures are acquired before correct target language structures. As a corollary, an L2 learner's vernacular style will first show typical IL forms and only later show adjustments to the target norm.

Tarone's approach to the notion of IL variability is essentially a sociolinguistic one, distinguishing a range of speech styles. In her 1982 paper (p. 81), she compares her sociolinguistic approach with the information-processing framework in cognitive psychology, which views language acquisition as the gradual transition from controlled to automatic processing (McLaughlin, 1980). She presumes that, in terms of the information-processing framework, vernacular style should be characterized as involving automatic processing.

In this section, I would like to pursue the line of reasoning in the information-processing framework, in order to ascertain the compatibility of Tarone's following two claims: (1) in the vernacular, typical IL forms appear before target forms, and (2) the vernacular style involves automatic processing.

The information-processing view holds that the acquisition of language skills starts with controlled processing. Controlled processing involves a focus of attention on individual language forms and their meanings and their integration into receptive and productive skills. Language learning consists of the taking in of linguistic information. For any linguistic information to be really taken in, that is, processed in such a way that it can later be retrieved from memory, a certain amount of attention is required (Hulstijn, 1986, 1987, 1989, 1990). The first few times that a certain word or structure is comprehended,

more attention is needed than on later occasions. Similarly, in production tasks, all words and structures produced for the first few times will require a great deal of effort and attention, although this attention need not be conscious.[1]

Why is it then that the speech of L1 and L2 learners in the early stages of development contains so many nontarget forms? The most likely reason is that learners in these stages cannot yet process target utterances in their full complexity on all linguistic levels. These learners are restricted in their processing capacity by their limited knowledge. For the production of any form there are three possibilities. The required information can be (1) present and automatized (i.e., incorporated in an automatic procedure and therefore readily available), (2) present, but not yet automatized, or (3) absent. If, as in 2, there is little time to process the available but unautomatized information and, as in 3, when the required information is simply absent, then the learner has to resort to alternative means of expression, invoking various kinds of heuristics or strategies (Faerch & Kasper, 1980, 1984). The application of such heuristics may result in the production of various non-target-like forms. Thus, the information-processing framework views the production of non-target-like forms as stemming from the learner's attempt to convey information while lacking sufficient L2 skills. Some of these nontarget forms can become automatized in their turn (resulting in so-called fossilizations).

In the early stages of language acquisition, learners lack skill in the use of some forms, but not in the use of others. The former forms require attention; the latter do not. Thus, for L2 users, attention to form is always affected by their familiarity with individual forms, apart from and in addition to the influence exercised by their speech style. Hence, attention to form is likely to vary within just as well as between speech styles.[2] It is reasonable to assume that the productions of most second-language learners will remain for a long time the result of a mixture of some lexical and grammatical elements which are more automatized and other elements which are less automatized, the latter elements requiring more and the former elements requiring less attention.

We can now answer the question: To what extent is the information-processing view compatible with Tarone's claims concerning the dual primacy of the vernacular as the style (1) being most stable and consistent because the learner's attention is not focused on form, and (2) manifesting typical IL forms before correct target forms. The answer can be summarized with the following three statements.

[1] Paying attention to linguistic forms and their meanings does not imply consciousness on the part of the information processer nor a knowledge of explicit grammar rules, that is, a metalinguistic level of analysis (McLaughlin, Rossman, & McLeod, 1983; McLaughlin, 1987, chap. 6).

[2] This may explain the fact that some researchers have reported low amounts of systematicity in the vernacular style of nonadvanced L2 learners (Sato, 1985).

1. The definition of vernacular style as the style in which L2 users pay least attention to form is to be attenuated so as to allow for considerable differences in attention to individual forms. In other words, style itself does not determine the degree of attention to all produced forms alike. It is, consequently, impossible to make general predictions concerning the probability of occurrence of IL variability solely on the basis of style differences. Only forms not stemming from automatized information may vary with style.
2. Beginning language learners (due to their restricted language skills) are likely to pay more attention to individual elements than more advanced learners. This difference in attention between beginning and advanced learners may even exist when communicating in the vernacular style. To that extent, the vernacular speech of beginning learners may well exhibit more variability than that of advanced learners.
3. The production of nontarget forms does not necessarily originate in the vernacular. The first time that a nontarget form occurs, it may be the result of a heuristic device, invoked when the learner lacks knowledge or skill. This may happen in casual and careful styles alike. Automatized nontarget forms (fossilizations), however, are more likely to occur in casual than in careful style. If the learner knows what the corresponding target forms are, he or she is more likely to use the correct target form in careful style (due to heightened attention to correctness), while still using the fossilization in the vernacular style.

3. THE STUDY OF ATTENTION TO FORM IN INTERACTION WITH OTHER FACTORS

Tarone (1985, and Chapter 1, this volume) raises the question concerning the number of speech styles. She juxtaposes Krashen's Monitor Theory (1981 and elsewhere) with her own Chameleon model. According to Krashen, there are only two production modes: monitored and unmonitored production. The Chameleon model, on the other hand, claims the existence of more than two styles. The number of these styles, however, is not specified. Attention is not an on–off, or all-or-nothing matter, but a matter of degree (Tarone, 1979, p. 183).

It seems to me that, as Tarone now acknowledges, the question of whether there are two or more than two styles is inadequate. The style–number issue can become meaningful, however, if other theoretical concepts are brought into play. One could attempt to provide empirical evidence for the sole impact of focus on form. One study (Hulstijn, 1982, also reported in Hulstijn & Hulstijn, 1984) did in fact provide such evidence. However, what needs to be empha-

sized is that in itself the existence of attention's influence on production accuracy, and hence on IL variability, is fairly obvious. I would argue that whenever individuals perform a task requiring any skill, they will be *a priori* capable of improving the formal quality of their performance when focusing their attention on the standard for this skill, provided that they do have some knowledge of the (perceived) standard. This is such a basic assumption that it should only surprise us if empirical evidence for its support could *not* be provided.

What may make attention to form a worthwhile object of investigation, however, is the influence of other factors moderating its impact. For example, in our study (Hulstijn, 1982; Hulstijn & Hulstijn, 1984) we found that, contrary to what one might expect, successful monitoring of grammar rules does not necessarily require that learners be able to correctly verbalize them. In this study, we assessed learners' performance on three tasks: (1) a grammatical judgment task (on the basis of which potential subjects were selected for participation in the experiment proper); (2) an oral story-retelling task, which was administered under four experimentally manipulated conditions (with and without time pressure and with focus on form or on content); and (3) a conversation with the experimenter during which subjects were assessed on their ability to explicitly verbalize the two word-order rules under investigation (Inversion in main clauses, and Verb Final in subclauses; more details concerning these tasks and word-order rules are given in subsequent sections of this chapter). The results showed that learners who could not explicitly state the two word-order rules during the interview, and learners who could only state partly correct or even incorrect rules, had still been able to improve their performance in the experimental story-retelling task. When required to pay attention to form, they applied the two word-order rules correctly much more often than when required to pay attention to the content of their production. These learners had improved the accuracy of their production with the same percentage (although obviously not to the same level) as those learners who were able to explicitly state the correct rules. Thus, focus on form in the story-retelling experiment was shown to have equal impact on the production of learners both with and without correct rule knowledge.

We also assessed the relation between rule monitoring and cognitive style, that is, reflection versus impulsivity, but we did not find that reflective subjects made more use of the Monitor in the story-retelling experiment than impulsive subjects (cf. Krashen's distinction between underusers, optimal users, and overusers of the Monitor; Krashen, 1981, chap. 1).

Thus, more interesting than the study of the impact of attention to form (style-shifting, monitoring) on L2 production was the investigation into the possible relationships between monitoring and other factors: explicit rule knowledge and cognitive style.

It makes little sense to consider the effect of attention on learner language or to study the number of styles on the continuum as a research goal in its own right. Neither is it very meaningful to study variability (in learner language) for its own sake. We study variability in IL because we want to know how IL is caused to change diachronically and synchronically by various internal and external forces (a similar point of view to the study of variability is adopted by Ellis, 1985a, chap. 4). Hence, it is not so much the study of variability itself but rather the impact of internal and external forces upon it which may increase our theoretical understanding of SLA.[3]

In short, I would argue that the mere existence of attention to form and its general influence on language production is not particularly illuminating. The issue concerning the number of style differences in IL is worthwhile investigating only if the supposed styles can be hypothesized to be differentially associated with other relevant concepts in SLA theory in addition to the degree of attention paid to form.

4. SUBJECT SELECTION REQUIREMENTS FOR VARIABILITY RESEARCH

Investigations into IL variability within subjects (Ss), as caused by nonlinguistic factors (such as task and style differences), have to meet certain requirements. One crucial condition is that the IL feature under investigation can rightly be assumed to vary within Ss. If we cannot in advance expect Ss' performances to exhibit variability, it doesn't make sense to investigate if and how this variability is influenced by context factors. Consequently, one would generally select Ss on the basis of a pretest. For example, a researcher investigating the influence of style-shifting on the presence or absence of certain function words (e.g., copula, articles) or functional morphemes (e.g., verb endings) might first ascertain whether the potential Ss do indeed sometimes add these elements and leave them out at other times.

I demonstrate such a subject-selection procedure with my own study (Hulstijn, 1982). First however, I give a brief description of the two Dutch word-

[1] A similar point can be made in another SLA research area, pertaining to the hotly debated issue of whether L2 proficiency should be regarded holistically as one global proficiency or as consisting of various separate components (Oller, 1983; Vollmer, 1983). I have argued elsewhere (Hulstijn, 1985) that the existence of various proficiency components is in itself not very illuminating. What we are interested in, however, is whether and how various social, psychological, and educational factors differentially affect the supposed proficiency components. In a similar vein, I am arguing here that the influence of attention to form on language production by itself isn't illuminating. Instead, we must find out if and how social, psychological, and educational factors are differentially associated with speech styles and attention paid to form.

order rules under investigation: Inversion and Verb Final. Consider the following examples:

(1) *David heeft misschien een fiets.*
     (David has perhaps a bike.)

(2) *Misschien heeft David een fiets.*
     (Perhaps has David a bike.)

(3) **Misschien David heeft een fiets.*
     (Perhaps David has a bike.)

In sentence (1) the subject precedes the finite verb. In sentence (2), a constituent other than the subject has taken the first place, and the subject has moved to the third place. In traditional grammar this is called *inversion,* as it appears that the subject and finite verb in sentence (2) have been "inverted," compared to that in sentence (1). Sentence (3) is incorrect; many foreigners make errors of type in sentence (3). Next, consider examples (4) and (5), representing subclauses:

(4) *Ik geloof dat David een fiets heeft.*
     (I believe that David a bike has.)

(5) **Ik geloof dat David heeft een fiets.*
     (I believe that David has a bike.)

From sentence (4), it can be seen that the finite verb takes the final position in a subclause. Many foreigners make errors as in sentence (5).

In our research on the influence of Time Pressure and Focus of Attention on the correct use of Inversion and Verb Final in the IL of Dutch learners, it was essential to select for participation in the experiment only learners who could be expected to exhibit variable use of both Inversion and Verb Final. Thus, we wanted to select Ss who would sometimes use Inversion correctly, as in (2), and sometimes incorrectly, as in (3). Such learners would also have to use Verb Final correctly on some occasions, as in (4), and incorrectly at other times, as in (5). Since the experiment itself dealt with variability in oral story retelling under four conditions, we reasoned that if learners were to exhibit variable performance even on a paper-and-pencil test requiring attention to form, they would be maximally likely to exhibit variable performance in an oral story-retelling task. We therefore chose a sentence correction task for the selection

of subjects. The Dutch learners who took this test had to judge the grammaticality of 40 stimulus sentences and had to correct observed errors. Twenty sentences (10 correct and 10 incorrect) served as distractors. The remaining 20 sentences, containing 10 Inversion errors and 10 Verb Final errors, were scored. In order to be selected as a subject in the experiment, a learner would have to have an Inversion score as well as a Verb Final score of more than 10% but less than 90% correct. The result of this test is in itself revealing: although Inversion and Verb Final are extremely common errors in Dutch (and German) IL, only one in four intermediate Dutch learners tested met *both* requirements. Almost invariantly, performance on Inversion was better (more errors corrected) than on Verb Final (fewer errors corrected), suggesting that Inversion is generally acquired (i.e., to the level of automaticity) before Verb Final (for a discussion of the related literature see Hulstijn, 1984). The methodological implication of this finding is that the more structures the researcher wants to investigate, the more constraints are imposed on the subjects, if each subject must exhibit variability in *all* these structures[4].

In addition to this grammar selection test, we administered a listening comprehension test in order to ascertain whether potential Ss were able to comprehend samples of spoken Dutch similar to the samples used as stimuli in the experiment. On the basis of these two selection instruments, 32 Dutch learners were invited to participate in the experiment.

In the story-telling experiment, administered a few weeks after the pretests, all Ss that had been selected with these procedures applied Inversion and Verb Final in a variable manner, although their Inversion performance was higher than their Verb Final performance (Table 1). Inversion performance varied from an average of 78% correct in Focus of Attention on Information with no Time Pressure to 88% in Focus of Attention on Grammar with no Time Pressure; Verb Final performance varied from 36% in Focus of Attention on Information with Time Pressure to 59% in Focus of Attention on Grammar with no Time Pressure.

The demonstration of IL variability required a great deal of attention and effort in our study. But with these selection procedures, floor and ceiling effects in the use of Inversion and Verb Final could be avoided, allowing context effects, if existent, to affect IL variability.

Inversion and Verb Final are relatively difficult word-order rules and may therefore take longer to learn (Hulstijn, 1984). Hence the period of variable performance may be relatively long, giving more room to the researcher to

[4] In her style-shifting study, Tarone (1985) analyzed four forms: third-person singular present tense -*s*, noun plural, article, and direct object pronoun. However, it would be extremely unlikely that all subjects were to exhibit variable performance on such widely differing forms. Tarone's findings (1985, appendix B) confirm this improbability.

Table 1. Mean Scores for Response Length, Speech Rate, Repeats, Self-Corrections, Information Units, Inversion, and Verb Final, across All 32 Subjects

Dependent variable		Focus of attention on:		Mean
		Information	Grammar	
1. Response duration (in seconds)	Time pressure			
	Present	21.2	25.4	23.3
	Absent	30.9	42.2	36.5
	Mean	26.0	33.8	
2. Speech rate (words/second)	Time pressure			
	Present	1.44	1.16	1.30
	Absent	1.08	0.77	0.93
	Mean	1.26	0.97	
3. Repeats (per 100 words)	Time pressure			
	Present	2.84	3.53	3.19
	Absent	2.48	3.83	3.16
	Mean	2.66	3.68	
4. Self-corrections (per 100 words)	Time pressure			
	Present	2.89	3.35	3.12
	Absent	2.83	2.91	2.87
	Mean	2.87	3.13	
5. Information units (correctly reproduced; maximum = 4)	Time pressure			
	Present	3.07	2.65	2.86
	Absent	3.11	2.66	2.89
	Mean	3.09	2.66	
6. Inversion (correct use in %)	Time pressure			
	Present	81.0	85.7	83.4
	Absent	77.6	87.9	82.7
	Mean	79.3	86.8	
7. Verb final (correct use in %)	Time pressure			
	Present	36.1	55.7	45.9
	Absent	37.6	59.1	48.4
	Mean	36.8	57.4	

investigate the influence of style shifting. However, in investigations of linguistically simpler features, such as, in English, the addition of third-person singular -*s* to the verb stem in present tense (Tarone, 1985), it may well be even more difficult to demonstrate the influence of style differences. The time period during which performance of an individual learner is variable may be as

short as a couple of days, because this verb ending can be acquired relatively easily (and quickly) to the level of automaticity. Before this period, the learner may never supply this ending, and afterwards he or she may invariantly supply it, regardless of communicative situation. Hence, before or after this period, the learner is not of any use to an investigation of style-shifting on variable use of third-person -s. This underscores the importance of the inclusion of pretesting procedures in the study of IL variability.

5. THE DISTINCTION BETWEEN TASK AND TASK REQUIREMENTS

Following Labov, Tarone (1985) claims that variability in IL is related to task. As mentioned before, Tarone calls these task-related versions of IL "styles." Investigations into task-related variability, as conducted by sociolinguists as well as by IL researchers, are sometimes based on the assumption that tasks differentially cause learners to pay attention to language form. Tarone (1985, p. 375, note 3) explicitly states that the researcher cannot in advance be certain but can only assume that the tasks used in an investigation will indeed cause learners to focus on form in different degrees. It seems to me, however, that researchers can do better than assume (and hope) that this is so. They can try to actively manipulate the degree of attention to form. This can be done by varying the task instructions in such a way that the attention requirements will differ, while the task remains unchanged. The point is that "task" and "task requirements" are different notions. One can present subjects with the same task under different requirements, making different demands on their capabilities. This is illustrated with our study (Hulstijn, 1982; Hulstijn & Hulstijn, 1984).

In this study, we presented 32 adult learners of Dutch as a second language with the same task (story retelling) under four different conditions (repeated-measures design). Subjects, who were tested individually, listened to passages of L2 speech dealing with topics from everyday life. These passages were three or four sentences long (about 30 words). All passages contained approximately the same amount of information (four information units each, each unit being roughly equivalent to a proposition). Here are two sample stimulus texts, followed by their response frames (i.e., cues with which Ss had to begin their response) and their information units, all translated into English:

Stimulus text 19: I was in hospital last month. The reason was that I'd broken my leg. I had to stay in hospital for five days. But the people there were all very kind to me.
Response frame: Last month . . .
Information units: (1) in hospital, (2) broken leg, (3) five days, (4) kind people.

Stimulus text 8: Recently, we had a radio stolen from our apartment. It was while we were on holiday. It's very easy for them to just open a window or something. But the whole thing cost us a good 800 guilders.
Response frame: This lady says that . . .
Information units: (1) radio stolen, (2) while on holiday, (3) it's easy to get in, (4) damages: 800 guilders.

After each passage had been presented, Ss were required to retell its content in L2. Ss were free to use their own words or the words from the stimulus passage. (The passages were too long for Ss to remember them word by word, but not too long to remember their content.) However, they had to begin their responses with a few words (the "response frame") projected on a screen by means of a slide projector. The response frames served as cues, forcing Ss to produce sentences of the types under investigation. For instance, in item 19 above, the frame "Last month . . ." elicites an obligatory Inversion context. Similarly, the frame "This lady says that . . ." (item 8) elicites an obligatory Verb Final context. The basic instructions for this experimental task read as follows (translated into English):

- First you'll hear a short text.
- Next you'll see a slide with a few words.
- Then you have to retell what you've heard.
    1. Start with the words from the slide.
    2. Continue in your own words.

Within this story-retelling task, two factors were manipulated: Time Pressure (present or absent) and Focus of Attention (on information or on grammatical correctness). This gave four conditions: Information/Fast, Information/Slow, Grammar/Fast, and Grammar/Slow. We were thus able to change the task requirements while holding the task constant. We created these differences in task requirements by explicitly *instructing* and *training* subjects. Subjects were instructed that they had to concentrate on information or on form and to perform their tasks as fast as possible or at their ease, depending on the experimental condition. Futhermore, Ss were trained in responding according to these instructions before the experimental stimuli were presented. During these practice sessions, Ss were given feedback on their responses and further encouraged to respond according to the specific demands of each condition. Thus, during the practice sessions of the two Information conditions (Information/Fast and Information/Slow), Ss were informed about information units missing in their responses; in the two Grammar conditions (Grammar/Fast and Grammar/Slow) they were informed about possible Inversion or Verb Final errors. (Note that at no point during the experiment did the experimentor inform Ss which grammar rules he was interested in, nor did he state any rules explicitly in his feedback during the practice session.)

During the training of the two Fast conditions (Information/Fast and Grammar/Fast), the experimenter timed Ss' responses with a stopwatch, informed them about their response times, and encouraged them to respond as fast as they could. During the two Slow conditions (Information/Slow and Grammar/Slow), he encouraged Ss to take as much time for their responses as they needed. Altogether, every S had to retell 68 stimulus passages. In each of the four conditions there were four practice items followed by twelve experimental items. The first condition to be administered was preceded by four items that served to make the S familiar with the story-retelling task, postponing the Time and Attention requirements until the practice session of each condition separately. Hence, of the 68 responses, only 48 (12 in each condition) were scored for analysis.

The dependent variables in these analyses were, for each condition (average of 12 responses) and subject:

1. Response Duration, measured in seconds.
2. Speech Rate (words/second).
3. Repeats (a Repeat is defined as a literal reiteration of a stretch of speech without change, the shortest Repeat consisting of one phoneme only).
4. Self-Corrections (Self-Corrections are similar to repeats in that they involve an interruption of the speech flow, the difference being that, in the case of Self-Corrections, the original utterance is being changed).
5. Information Units correctly reproduced (each stimulus text contained four Information Units; see items 19 and 8 above).
6. Inversion structures correctly used.
7. Verb Final structures correctly used.

The results of this experiment are shown in Tables 1 and 2. These results provided evidence that it is indeed only the Attention factor, and not the Time factor, that significantly and substantially influenced the grammatical correctness of Ss' L2 productions. Although the Time factor substantially and significantly affected the Response Duration and Speech Rate (variables 1 and 2), it did not affect their grammatical correctness (variables 6 and 7), their informational correctness (variable 5), nor their fluency (variables 3 and 4). It was Focus of Attention which was solely responsible for the difference in grammatical and informational correctness of the responses.

The separate manipulation of Time and Attention factors was motivated by the results of a previous study (Hulstijn, 1980). In that study we also used a story-retelling task, which had to be performed twice: first fast and later slowly, thus giving two conditions along the Time factor. In this previous study, the Time factor had caused a substantial and significant increase in the number of obligatory contexts from fast to slow condition, but the proportion of correct realizations in the slow condition had remained just the same. This indicated

Table 2. The Influence of Time Pressure and Focus of Attention

Dependent variable	Source	F ratio ($df = 1,30$)	$p<$
1. Response duration	Time pressure	66.28	.001
	Focus of attention	37.27	.001
	Interaction	19.33	.001
2. Speech rate	Time pressure	150.79	.0001
	Focus of attention	120.49	.0001
	Interaction	0.28	
3. Repeats	Time pressure	0.02	
	Focus of attention	11.18	.01
	Interaction	5.92	.05
4. Self-corrections	Time pressure	1.33	
	Focus of attention	1.96	
	Interaction	2.05	
5. Information units	Time pressure	0.44	
	Focus of attention	46.48	.001
	Interaction	0.08	
6. Inversion	Time pressure	0.10	
	Focus of attention	5.40	.05
	Interaction	2.33	
7. Verb final	Time pressure	0.46	
	Focus of attention	32.13	.001
	Interaction	0.09	

that the Time factor has only a quantitative, but not a qualitative, effect. That is why we decided to manipulate Attention independently from Time in our later study.

The conclusions from these experiments are the following: it is necessary to distinguish between task and task requirement (in terms of, e.g., attention paid to form) and it is possible to operationalize these notions independently from each other. This does not mean, however, that they should always be kept separate. Labov's (1970) method, which later was also successfully applied in L2 research (Dickerson, 1975), consisted of performance comparison on three different tasks (free speech, reading dialogues aloud, and reading word lists aloud). These elicitation procedures (in this order) created increasing proportions of standardlike pronunciations of certain phonemes. Although in this method the task was not held constant, it seems reasonable to conclude that this increase in targetlike production was due to an increase in attention paid to form. In general, however, for variability research it is preferable not to change tasks with task requirements but, rather, to manipulate task requirements while holding the task constant.

6. SUMMARY

In this chapter, I have tried to demonstrate how Tarone's sociolinguistic view on IL variability, based on the notion of the vernacular, can be enriched by a cognitive view, based on the notions of controlled and automatic information processing. I have argued that, even in the vernacular (most casual) style, attention to form is seldom altogether absent, and that the production of nontarget forms does not necessarily originate in the vernacular style, as claimed by Tarone. A nontarget form can occur as a result of a strategy compensating for the learner's lack of knowledge or skill to produce a certain form. This may happen in casual and careful style alike.

Furthermore, I have argued that, in order to increase our understanding of SLA processes, IL variability should not be studied in isolation, as caused by style-shifting (attention to form), but rather in interaction with moderating linguistic, social, and cognitive factors.

Finally, I described an IL variability study of my own, in order to illustrate two methodological points in the empirical study of IL variability. First, since L2 learners cannot generally be expected to exhibit variable IL performance on just any linguistic feature, it is important to include a pretest in the research design which will determine those learners who are in fact likely to exhibit variable performance on the linguistic features under investigation. Second, the distinction between "task" and "task requirements" enables the researcher to study the influence of style-shifting (attention to form) on IL variability by varying task requirements while holding the task constant.

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