The Comprehension Strategies of Second Language (French) Listeners: A Descriptive Study[1]

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ABSTRACT *This paper reports on a study of the relationship between the types of listening comprehension strategies reported, the frequency of their use, and the differences in reported use across four variables: level of language proficiency, gender, listening ability, and learning style. High school students of French reported on their thought processes during a think-aloud procedure. All students reported using metacognitive and cognitive strategies, with an overall increase in total number of strategies reported by proficiency level. Results indicate clear differences in reported strategy use by listening ability and proficiency level. The use of metacognitive strategies, such as comprehension monitoring, problem identification, and selective attention appeared to be the significant factor distinguishing the successful from the less successful listener. Differences for gender were minimal, and differences for learning style were inconclusive. A qualitative analysis of representative protocols also pointed to the integral role of metacognitive strategies as well as differences in the use of prior knowledge, inferencing, prediction skills, and monitoring. Results are discussed in the light of information-processing theory. Implications for pedagogy conclude the paper.*

Learning strategies are becoming an important part of a revitalized multidimensional Core French curriculum in Canada (programs where French is taught as a subject). The National Core French study (Leblanc 1990) recommends that explicit strategy instruction become part of a General Language Education syllabus. Provinces are revising their language programs to fit this new curriculum model, which includes a focus on the acquisition of learning strategies. The growing interest in learning strategies reflects an awareness that students can, and need to, develop tools to become more effective and autonomous language learners. This interest is further evidenced by the release of a number of significant books on the topic (Wenden and Rubin 1987; Brown 1989; Prokop 1989; Cohen 1990; O'Malley and Chamot 1990; Oxford 1990; Mendelsohn 1994).

Of the four language skills, listening is perhaps the most critical for language learning at the beginning stages, especially for children. Listening is a highly integrative skill, and research has demonstrated its crucial role in language acquisition (for example, Asher 1969; Postovsky 1978; Nord 1978; Winitz 1981; Byrnes 1984; Dunkel 1986, 1991; Leblanc 1986; Rost 1990; Feyten 1991; Mendelsohn and Rubin 1995). Listening internalizes the rules of language and facilitates the emergence of other language skills. Therefore, given the salience of listening in language learning, an investigation of listening comprehension strategies can help clarify the process of listening and provide a more solid theoretical base for what teachers should do in the classroom. Awareness and deployment of effective listening strategies will help students capitalize on the language input they are receiving.

In order to elicit data on listening strategies,

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the present study used three different forms of verbal report (Cohen 1987), each one closer in time to the actual listening event: self-report through delayed retrospection with a structured interview (Phase I), self-observation through immediate retrospection with a stimulated recall (Phase II), and self-revealment through introspection with a think-aloud procedure (Phase III). Phase I used a semistructured interview to uncover the types of strategies students used in different situations; e.g., listening to the teacher, classroom listening activities, listening to television in French, etc. (Vandergrift 1996). Phase II used a stimulated recall procedure to uncover the types of strategies students use to understand their interlocutor during a language proficiency interview. This paper will focus on the results of Phase III, which used a think-aloud procedure to answer the following research questions: 1) What are the strategies that Core French high school students report using while listening to authentic texts? 2) How often do the students report using each listening strategy? 3) What are the differences in reported listening strategy use by a) level of language proficiency; b) listening ability; c) gender; and d) learning style?

Literature Review

While second language strategy research has expanded in recent years, the number of studies in listening comprehension is relatively small (Bacon and Swaffar 1993), and the research base for listening strategies is even more limited (Rubin 1994). The following studies have attempted to identify the strategies learners bring to the listening comprehension task.

The listening strategies of effective and less effective adult ESL learners were first studied by Murphy (1985), using a think-aloud procedure. He determined that effective listeners were more open and flexible, using more strategies and a greater variety of different strategies. Less effective listeners, on the other hand, concentrated too much on the text or on their own world knowledge, or they elaborated on the text information too late in the listening process. Murphy concluded that effective listeners use a wider variety of strategies and engage in more active interaction with the text. Murphy could not precisely name or classify many of the strategies he had identified since a systematic taxonomy of language learning strategies had not yet been sufficiently developed. The distinction between metacognitive strategies (the mental activities for directing the learning process) and cognitive strategies (the mental processes used to manipulate the target language in order to accomplish a task) had not yet been made in the second language learning literature.

Henner Stanchina (1987) first called attention to the importance of metacognitive strategies in effective listening comprehension, particularly the integral role of monitoring in the process. She demonstrated that the way in which listeners use syntactic, semantic, and schematic knowledge is a question of effective or ineffective strategy use. Effective listeners are constantly elaborating and transforming what they hear. They 1) use their stored knowledge and expectations to generate hypotheses on a text; 2) integrate new material into their ongoing interpretations; 3) make inferences to fill gaps; 4) evaluate their interpretations; and 5) revise their hypotheses when necessary. She concluded that effective listeners are able to recognize failure in comprehension and activate appropriate knowledge to repair the failure.

Differences in listening strategies between effective and less effective high school learners were investigated by Chamot and Küpper (1989). Using a think-aloud procedure, these researchers determined that effective students at the intermediate level made greater use of strategies such as selective attention, self-evaluation, note-taking, and elaboration (use of world knowledge). Although there appeared to be very little quantitative difference between the two groups in use of strategies such as inferencing and monitoring, there were qualitative differences; effective learners used these strategies with greater persistence and purpose. The results for university-level Russian students in the same study indicated that

effective listeners do more comprehension monitoring and problem identification and they combine strategies such as inferencing and elaboration more often and in more interesting ways.

Using a think-aloud procedure again, O'Malley, Chamot, and Küpper (1989) examined listening strategies in greater depth with intermediate-level high school ESL learners. A qualitative analysis of the protocols demonstrated that successful listeners appeared to decide what to attend to when listening, maintain attention, and redirect it when distracted. They tended to approach texts globally, by inferring meaning from context and effective self-questioning, relating what they heard to their world knowledge and personal experience. On the other hand, less successful listeners were easily "thrown off" when they encountered anything unknown, tended to segment what they heard on a word-by-word basis, and made fewer connections between new information and their own lives. From a quantitative perspective, successful listeners appeared to use self-monitoring, elaboration, and inferencing more than their less successful peers.

Bacon (1992a, 1992b) investigated the listening strategies of university students learning Spanish by asking her subjects to think aloud after listening to an oral text. Based on a quantitative analysis, she concluded that subjects used more cognitive than metacognitive strategies and that, with regard to the latter, females used a significantly higher proportion than did the males, who tended to favor a "direct and more varied cognitive approach." In her qualitative analysis of the differences between successful and less successful listeners, Bacon concluded that success in listening appears to be related to the use of a variety of strategies, flexibility in changing strategies, motivation, self-control, maintaining attention, and effective use of background knowledge (elaboration). Interestingly, she noted that monitoring appeared to be used equally by successful and less successful listeners, although the former were "more realistic in evaluating their comprehension."

Vandergrift (1996), in the first phase of his study, used a structured interview to identify the types and number of distinct strategies that high school Core French students at different course levels reported using during different types of listening tasks. Students at all four course levels reported using strategies related to three broad categories: metacognitive, cognitive, and socioaffective strategies. The total number of distinct strategies reported increased by course level. Of the total number of strategies reported by each student, the largest percentage were cognitive strategies. Although students reported fewer distinct metacognitive strategies, the number of reported strategies in this category increased by course level; females tended to report a greater number of distinct metacognitive strategies than males. While the overall numbers were fewer than the numbers reported in the other two strategy categories, reported use of socioaffective strategies also increased by course level.

As stated earlier, knowledge about listening comprehension strategies is still cursory because most language learning strategy research attention has been devoted to reading, writing, and speaking. While an understanding of the complex processes may be limited, the research literature on listening comprehension strategies points to some useful findings for both content and methodology: 1) metacognitive strategies such as selective attention and comprehension monitoring, as well as cognitive strategies such as elaboration and inferencing, are reported more frequently and in more effective combinations by successful listeners; 2) a think-aloud procedure appears to be a productive methodology for intervening in the listening process and having students report on the strategies they are using; and 3) a qualitative analysis of protocols, in addition to a quantitative analysis, appears to provide greater insight into the differences between successful and less successful listeners.

Methodology

Subjects

Participants were high school Core French students (16-17 years old) from four different course levels (year one and year two of a three-year program; year five of a six-year program; and year eight of a nine-year program). Participants for the first phase of this study (36 students at four different course levels) were randomly chosen, but, in order to ensure a pure sample, any dropouts from immersion programs and any students who had discontinued their study of French and then started over at a later entry point were excluded. Based on the results of the Phase I retrospective interviews, 21 participants (10 successful and 11 unsuccessful listeners) were chosen for the think-aloud sessions. Selection was based on both reported strategy use in Phase I and consultation with the teachers. Those reporting the greatest frequency, variety, and sophistication of strategy use were classified as more successful listeners. Conversely, those at the other end of the continuum, reporting the least frequency, variety, and sophistication of strategy use, were classified as less successful listeners. This selection and subsequent grouping were further corroborated by the participants' teachers on the basis of academic performance.

Participants were interviewed individually in French using the ACTFL/ETS Oral Proficiency Interview (Lowe 1982) in order to determine their level of language proficiency. Results of these interviews generated the groupings of successful and less successful listeners as indicated in Table 1.

Listening Materials

Two methods were used to choose appropriate oral texts. Observations from the pilot study were used to identify a number of suitable texts, particularly at the more advanced level. In order to identify a range of easier texts, a series of 25 potentially useful texts was rated informally by a group of six students in year four of language study, whose achievement in French was ranked as average by their teacher. Students listened to each text once and, immediately afterwards, independently ranked it on a level of difficulty from one to five. On the basis of these responses, four levels of authentic oral texts were chosen, each one closely related to the life experience and interests of adolescents.[2] Easier texts (Levels I-III), taken from *A la radio* (Porter and Pellerin 1989), contained short language samples (about 45-60 seconds in real time) that were spoken at a natural speed, but clearly, and accompanied by appropriate real-life sound effects. Level I texts were administered to Novice I participants, Level II texts to Novice II participants, and Level III texts to Novice III participants. The most difficult texts (Level IV), taken from *Communication + 3*

TABLE 1

Grouping of Participants by Proficiency Level, Gender, and Listening Ability

Proficiency Level	Successful listeners		Less successful listeners	
	Males	Females	Males	Females
Novice I	—	—	1	3
Novice II	2	2	1	1
Novice III	—	—	2	2
Intermediate I	—	—	—	—
Intermediate II	1	2	1	—
Intermediate III	—	3	—	—
Totals	3	7	5	6

(Boucher and Ladouceur 1988), contained longer language samples (about two minutes in real time) characterized by a Québécois accent and accompanied by real-life sound effects. Level IV texts were administered to participants at the Intermediate level. Natural discourse boundaries were chosen as appropriate points at which to stop the tape for thinking aloud. Texts of differing levels of difficulty were essential to ensure that students talked about the strategies they were using, not their frustration with comprehension problems.

Research Procedures

The think-aloud procedure was adapted from O'Malley, Chamot, and Küpper (1989) and Rankin (1988) and had two separate phases: a training phase and a data collection phase. A training session (using mathematics problems or verbal reasoning tasks and actual oral texts in French) was conducted prior to the data collection sessions so that participants had a good understanding of how to think aloud and had lots of opportunity to practice. Hosenfeld (Cohen and Hosenfeld 1981) noted that, unless students were reminded to think aloud, they tended to retrospect. All data collection sessions were conducted on an individual basis and were audiorecorded for later verbatim transcription and coding. Sessions, lasting from 30-40 minutes each, took place within a week after the training session.

Each session included three stages: warm-up, transition, and verbal report. The warm-up stage, consisting of appropriate questions and humor, put participants at ease and established a good working relationship. In the transition stage, participants practiced thinking aloud, using the materials from the training session. When they felt satisfied that their reports accurately reflected the completeness of their thoughts (about five minutes), participants completed a trial run with the first text on the tape. The trial run (not recorded) proved to be useful for verifying the choice of text level before recording.

During the verbal report itself, think-aloud data were recorded for at least three different texts. For each text, the tape was stopped at the breaks indicated on the tape script, and participants attempted to verbalize what they were thinking. If the participant was unsure of what to say or how to continue, the investigator used noncueing probes such as "What are you thinking now?"; "How did you figure that out?"; "What's going on in the back of your mind?"; "Can you be more specific?"; etc. Great care was taken not to inadvertently plant strategies in the participant's mind. A second tape recorder was left on, recording the text, the think-aloud data, and any investigator prompts. Participants approached each text "cold"; that is, they had no idea what the text was going to be about. This was done deliberately so that no schemata were activated before listening began and, potentially, all thought processes leading to comprehension could be accessed.

Data Analysis

Protocols were analyzed using a predefined taxonomy of listening comprehension strategies identified, validated, and refined by O'Malley and Chamot (1990) and Vandergrift (1996). Although coding was guided by this classification scheme, it was not limited to these categories. Following Mann (1982), any strategy that did not fit these categories of analysis was formally defined with an accompanying example for reference in continued coding. A comprehensive list of listening strategies (Figure 1) includes definitions and examples. The list is divided into three main categories: metacognitive strategies (mental activities for directing language learning), cognitive strategies (mental activities for manipulating the language to accomplish a task), and socio-affective strategies (activities involving interaction or affective control in language learning). These strategies are often used in combination.

Verbal reports were transcribed verbatim. All protocols were coded independently by the investigator and a trained assistant. They met regularly to conduct reliability checks, and discussions of coding difficulties helped

FIGURE 1

Listening Comprehension Strategies and their Definitions with Representative Examples

Metacognitive Strategies

1. **Planning**: Developing an awareness of what needs to be done to accomplish a listening task, developing an appropriate action plan and/or appropriate contingency plans to overcome difficulties that may interfere with successful completion of the task.		
1a. **Advance organization**:	Clarifying the objectives of an anticipated listening task and/or proposing strategies for handling it.	I read over what we have to do. I try to think of questions the teacher is going to ask.
1b. **Directed attention**:	Deciding in advance to **attend in general** to the listening task and to ignore irrelevant distractors; maintaining attention while listening.	I listen really hard. I pick out the words that are familiar so that... (in combination with **inferencing**)
1c. **Selective attention**:	Deciding to **attend to specific aspects** of language input or situational details that assist in understanding and/or task completion.	I listen for the key words. I establish the speakers in the conversation, their relationship by tone of voice, how they will address each other. This will limit the topics of discussion (in combination with **planning, voice inferencing,** and **elaboration**).
1d. **Self-management**:	Understanding the conditions that help one successfully accomplish listening tasks and arranging for the presence of those conditions.	I try to get in the frame of mind to understand French. I put everything aside and concentrate on what she is saying.
2. **Monitoring**: Checking, verifying, or correcting one's comprehension or performance in the course of a listening task.		
2a. **Comprehension monitoring**:	Checking, verifying, or correcting one's understanding at the local level.	I translate and see if it sounds right (in combination with **translation**). I just try to put everything together, understanding one thing leads to understanding another.
2b. **Auditory monitoring**:	Using one's "ear" for the language (how something sounds) to make decisions.	I use my knowledge of Portuguese, primarily sound (in combination with **transfer**). I use the sound of words to relate to other words I know.
2c. **Double-check monitoring**:	Checking, verifying, or correcting one's understanding across the task or during the second time through the oral text.	I might catch it at the end and then I'd go back. Sunny in the morning, that's not making sense...(earlier) it sounded like a cold front, something doesn't make sense to me any more.
3. **Evaluation**: Checking the outcomes of one's listening comprehension against an internal measure of completeness and accuracy		
3a. **Performance evaluation**:	Judging one's overall execution of the task.	How close was I? (at end of a think-aloud report).

FIGURE 1 *(continued)*

3b. **Strategy evaluation:**	Judging one's strategy use.	I don't concentrate too much to the point of translation of individual words because then you just have a whole lot of words and not how they're strung together into some kind of meaning.
4. **Problem identification:**	Explicitly identifying the central point needing resolution in a task or identifying an aspect of the task that hinders its successful completion.	I'm not sure but "partager" and I'm not really sure what that means. I think that kind of has something to do with that. Music, there is something, ..."des jeux", I don't know what that is.

Cognitive Strategies

1. **Inferencing**: Using information within the text or conversational context to guess the meanings of unfamiliar language items associated with a listening task, to predict outcomes, or to fill in missing information.

1a. **Linguistic Inferencing:**	Using known words in an utterance to guess the meaning of unknown words.	I use other words in the sentence. I try to think of it in context and guess.
1b. **Voice** and **paralinguistic inferencing:**	Using tone of voice and/or paralinguistics to guess the meaning of unknown words in an utterance.	I listen to the way the words are said. I guess, using tone of voice as a clue.
1c. **Kinesic inferencing:**	Using facial expressions, body language, and hand movements to guess the meaning of unknown words used by a speaker.	I try to read her body language. I read her face. I use the teacher's hand gestures.
1d. **Extralinguistic inferencing:**	Using background sounds and relationships between speakers in an oral text, material in the response sheet, or concrete situational referents to guess the meaning of unknown words.	I guess on the basis of the kind of information the question asks for. I comprehend what the teacher chooses to write on the board to clarify what she is saying.
1e. **Between parts inferencing:**	Using information beyond the local sentential level to guess at meaning.	Because in the beginning she said "course," so maybe it was, maybe it was a race...may be a horse race... You pick out things you do know and in the whole situation piece it together so that you do know what it does mean.

2. **Elaboration**: Using prior knowledge from outside the text or conversational context and relating it to knowledge gained from the text or conversation in order to predict outcomes or fill in missing information.

2a. **Personal elaboration:**	Referring to prior experience personally.	I think there is some big picnic or a family gathering, sounds like fun, I don't know... You know...maybe they missed each other, because that happens to me lots we just miss accidentally and then you call up and say, "Well, what happened?"

(continued)

FIGURE 1 *(continued)*

2b. **World elaboration**:	Using knowledge gained from experience in the world.	Recognizing the names in sports helps you to know what sport they are talking about. I use the topic to determine the words that I will listen for (in combination with **selective attention**).
2c. **Academic elaboration**:	Using knowledge gained in academic situations.	[I know that] from doing telephone conversations in class. I relate the word to a topic we've studied. I try to think of all my background in French.
2d. **Questioning elaboration**:	Using a combination of questions and world knowledge to brainstorm logical possibilities.	Something about sixty-one, restaurant, sixty-one. Maybe it's the address. Um, he said he started, probably fixing up his apartment, something about his apartment. Probably just moved in, um, because they're fixing it up.
2e. **Creative elaboration**:	Making up a story line, or adopting a clever perspective.	Sounded like introducing something, like it says here is something but I can't figure out what it is, it could be like ...one of the athletes, like introducing some person or something. I guess there is a trip to the Carnival in Quebec so maybe it is like something for them to enter a date, to write, or draw...
2f. **Imagery**:	Using mental or actual pictures or visuals to represent information; coded as a separate category but viewed as a form of elaboration.	I can picture the words in my mind. I make pictures in my mind for words I know, then I fill in the picture that's missing in the sequence of pictures in my mind.
3. **Summarization**:	Making a mental or written summary of language and information presented in a listening task.	I remember the key points and run them through my head, "what happened here and what happened here" and get everything organized in order to answer the questions.
4. **Translation**:	Rendering ideas from one language to another in a relatively verbatim manner.	I translate. I'll say what she says in my head, but in English. A little voice inside me is translating.
5. **Transfer**:	Using knowledge of one language (e.g., cognates) to facilitate listening in another.	I try to relate the words to English. I use my knowledge of other languages: English to understand German and Portuguese (primarily sound) to understand French.
6. **Repetition**:	Repeating a chunk of language (a word or phrase) in the course of performing a listening task.	I sound out the words. I say the word to myself.

FIGURE 1 *(continued)*

7. **Resourcing**:	Using available reference sources of information about the target language, including dictionaries, textbooks, and prior work.	I look it up in a dictionary. I look in the back of the book.
8. **Grouping**:	Recalling information based on grouping according to common attributes.	I try to relate the words that sound the same. (in combination with **auditory monitoring**). I break up words for parts I might recognize.
9. **Note-taking**:	Writing down key words and concepts in abbreviated verbal, graphic, or numerical form to assist performance of a listening task.	I write down the word. When I write it down, it comes to my mind what it means.
10. **Deduction/ induction**:	Consciously applying learned or self-developed rules to understand the target language.	I use knowledge of the kinds of words such as parts of speech.
11. **Substitution**:	Selecting alternative approaches, revised plans, or different words or phrases to accomplish a listening task.	I substitute words, translate and see if it sounds right (in combination with **translation** and **comprehension monitoring**).

Socioaffective Strategies

1. **Questioning for clarification**:	Asking for explanation, verification, rephrasing, or examples about the language and/or task; posing questions to the self.	I'll ask the teacher. I'll ask for a repeat.
2. **Cooperation**:	Working together with someone other than an interlocutor to solve a problem, pool information, check a learning task, model a language activity, or get feedback on oral or written performance.	I ask someone who knows the word. I ask a friend. I ask the person next to me.
3. **Lowering anxiety**:	Reducing anxiety through the use of mental techniques that make one feel more competent to perform a listening task.	I think of something funny to calm me down. I take deep breaths.
4. **Self-encouragement**:	Providing personal motivation through positive self-talk and/or arranging rewards for oneself during a listening activity or upon its completion.	I try to get what I can. O.K...my hunch was right. I tell myself that everyone else is probably having some kind of problem as well.
5. **Taking emotional temperature**:	Becoming aware of, and getting in touch with one's emotions while listening, in order to avert negative ones and make the most of positive ones.	I take it home and take it out on my family. O.K. I'm getting mad 'cause I don't understand.

Source: Adapted from O'Malley and Chamot (1990, 137-139); Oxford (1990, 21); Vandergrift (1996).

to resolve questions and discrepancies; inter-rater reliability was .78.

When coding was completed, a listening comprehension strategy profile was developed for each participant. Each coded report of a strategy (token) was tabulated. A strategy profile for each participant was created by representing each strategy and strategy group reported as a percentage of total reported strategy use by that participant. For example, if participant D reported 134 strategies while thinking aloud during the three texts, of which 29 were metacognitive strategies, 104 were cognitive strategies and 1 was a socioaffective strategy, then D's strategy profile would be: metacognitive (21.65 percent), cognitive (77.61 percent), and socioaffective (.07 percent). Furthermore, if D reported elaboration (a cognitive strategy) 22 times and comprehension monitoring (a metacognitive strategy) 14 times, then these strategies would be reported in D's profile as: elaboration (17.65 percent) and comprehension monitoring (10.46 percent). Profiles were then grouped according to the different variables to be examined: 1) level of language proficiency, 2) gender, 3) listening ability, and 4) learning style. Grouped data for each variable were analyzed for any emerging patterns or trends in the nature and frequency of reported strategy use.

The ensuing presentation of results must be understood as suggestive of trends and patterns in strategy use rather than definitive, since the numbers within each grouping are too small to provide any power for a statistical analysis. As such, the results should be interpreted as distinct possibilities that will need to be validated with a larger sample.

Results

Reported Strategy Use

The data presented in Table 2 (on the next page) provides an overview of reported strategy use for all participants by major categories and for each strategy within a category. Cognitive strategies are reported most by all participants, followed by metacognitive strategies. When reported strategy use by Novice listeners is compared to that of Intermediate listeners, it is evident that the latter group reports using a higher percentage of metacognitive strategies. As reported metacognitive strategy use increases by proficiency level, reported use of certain cognitive strategies (transfer and translation) decreases sharply. Since the nature of a think-aloud procedure is not conducive to eliciting the report of socioaffective strategies, this category of strategies was reported as less than one per cent of the total strategy use. For that reason, incidence of reported use of these strategies is presented here only and will not be discussed further.

Metacognitive Strategies Reported

The most interesting pattern of reported strategy use emerging from the data in Table 2 is the increase in metacognitive strategies. Intermediate listeners reported using more than twice as many metacognitive strategies as Novice listeners. In fact, strategies such as comprehension monitoring, planning, and problem identification were reported twice as often by Intermediate listeners. Comprehension monitoring appears to be the metacognitive strategy reported most often. Even though the dominant report of cognitive strategies tends to mask the report of metacognitive strategy use, comprehension monitoring actually becomes the fourth most reported strategy for Intermediate listeners, bypassing cognitive strategies such as translation, transfer, and repetition that were reported more frequently by Novice listeners. Reported use of planning was rather surprising since there was no opportunity for planning before each listening task. As was mentioned earlier, participants began each task "cold"; that is, they were not prepared in any way (e.g., vocabulary, questions, title, introductory contextual statement, etc.) for what they were about to hear. Therefore, the strategies that relate to planning tended to be "on-line," predicting what might happen on the basis of what was just said or what was understood so far, as illustrated in the following examples:

TABLE 2

Mean Number of Strategies Reported by Category for Novice and Intermediate Listeners

Strategy	Novice n=14	Intermediate n=7	Total n=21
Planning	1.62	2.45	1.90
Comprehension monitoring	4.53	10.41	6.49
Self-evaluation	0.17	1.40	0.58
Problem identification	2.30	4.79	3.13
Metacognitive (Total)	**8.62**	**19.05**	**12.10**
Repetition	8.67	5.04	7.46
Grouping	0.59	0.00	0.39
Deduction/induction	1.01	0.37	0.80
Elaboration	20.46	21.71	20.88
Summarization	20.38	29.87	23.54
Transfer	11.38	2.90	8.55
Translation	13.09	4.73	10.30
Inferencing	15.50	15.84	15.61
Cognitive (Total)	**91.08**	**80.46**	**87.54**
Socioaffective (Total)	**0.30**	**0.49**	**0.36**

(Number represents a percentage of total strategy use)

> Doesn't sound like what...the guy had a good weekend. He's about to tell the girl why. (Intermediate III)

> I don't know just the, I don't know. He was saying what kind of special it's gonna be. I'm just waiting for it to come. (Novice II)

Cognitive Strategies Reported

A further examination of Table 2 reveals eight different cognitive strategies reported by participants. In particular, three strategies are reported heavily by all listeners: summarization, elaboration, and inferencing. This is followed by strategies such as translation, transfer, and repetition. Grouping was reported only at the Novice level and induction/deduction reported sporadically at both levels.

Another interesting pattern of reported strategy use conveyed by this table is the difference between Novice and Intermediate listeners in reported use of cognitive strategies. Whereas summarization is the dominant reported strategy for Intermediate listeners, followed by elaboration, both of these strategies are reported equally by Novice listeners. Inferencing appears to be the third most reported strategy, with almost equal reported use by Novice and Intermediate listeners. The major difference between these groups appears in the strategies reported most frequently after the three most salient strategies cited above. Whereas Novice listeners reported more surface-processing strategies such as translation, transfer, and repetition, Intermediate listeners reported more use of deep-processing, metacognitive strategies such as comprehension monitoring and problem identification. It appears that a shift in depth of processing may be an important distinction between Novice and Intermediate listeners.

Relationship Between Reported Strategy Use and the Variables Under Investigation

Proficiency Level

Some basic differences in the reported use of listening comprehension strategies have already been established for listeners at the Novice and Intermediate levels of language proficiency. This section will examine data presented in Table 3 for more subtle shifts in strategies reported between sublevels within each of these two proficiency levels.

Within the Novice level there is an interesting shift from one sublevel to another with regard to the reported use of cognitive strategies such as elaboration, summarization, transfer, translation, and inferencing. Novice I listeners reported a strong preference for elaboration, inferencing, and transfer. At the Novice II level, however, reported use of cognitive strategies is more evenly distributed than at any other sublevel. At the Novice III level, listeners reported a strong preference for summarization, followed by elaboration and inferencing. This pattern of heavy reported use of summarization, elaboration, and inferencing seems to stabilize at the Intermediate level, where a reported increase in metacognitive strategies is counterbalanced by a decrease in cognitive strategies such as transfer, translation, and repetition. It is also interesting to note that the use of repetition increases through the Novice level and drops off sharply at the Intermediate level. The shifts in reported metacognitive strategy use between sublevels is less dramatic. Comprehension monitoring tends to increase by sublevel and level off at the Intermediate level, at which point the report of other metacognitive strategies such as planning and self-evaluation increases slightly.

Gender

The data presented in Table 4 (on the next page) show that there are very few differences when reported strategy use for all male and female participants is compared. Female students reported using slightly more metacognitive strategies than males, almost exclu-

TABLE 3

Mean Number of Strategies Reported by Proficiency Level

	Nov. I	**Nov. II**	**Nov. III**	**Int. II**	**Int. III**
	n=4	n=6	n=4	n=4	n=3
Planning	1.81	1.48	1.64	1.84	3.27
Comprehension Monitoring	2.91	5.96	3.93	10.88	9.79
Self-evaluation	0.37	0.17	0.00	0.23	2.97
Problem identification	1.37	1.92	3.79	5.28	4.13
Metacognitive (total)	**6.46**	**9.53**	**9.36**	**18.23**	**20.16**
Repetition	4.71	9.90	10.79	5.72	4.13
Grouping	1.74	0.22	0.00	0.00	0.00
Deduction/induction	1.16	0.89	1.04	0.43	0.30
Elaboration	25.38	18.67	18.23	22.18	21.08
Summarization	12.91	16.79	33.22	28.95	31.10
Transfer	16.47	12.75	4.25	3.43	2.19
Translation	9.74	17.47	6.80	3.88	4.37
Inferencing	20.39	11.71	16.31	15.87	15.81
Cognitive (total)	**92.50**	**88.40**	**90.64**	**80.46**	**78.98**

(Number represents a percentage of total strategy use)

sively self-evaluation strategies. Overall, the pattern of reported strategy use presented in Table 4 is evident again for both male and female students. The same six cognitive strategies—i.e., summarization, elaboration, inferencing, translation, transfer, and repetition—continue to be the strategies reported most often, followed by the metacognitive strategy of comprehension monitoring. The only difference lies in the reported use of repetition; male students reported it more than females, resulting in male students ranking it higher than transfer, which was preferred by female students.

Listening Ability

An examination of the data presented in Table 4 reveals that the biggest difference between successful and less successful listeners appears to lie in the reported use of metacognitive strategies. Successful listeners report twice the number of metacognitive strategies reported by less successful listeners. A closer examination of individual strategies reveals that the most notable differences lie in the reported use of comprehension monitoring and problem identification.

Comparing successful and less successful listeners, differences in reported cognitive strategy use are not as sharp as differences in reported metacognitive strategy use. The most striking difference lies in the report of transfer; less successful listeners report using this strategy almost twice as much as their more successful counterparts. Presumably, their limited linguistic base forces them to rely more on cognates as a basis for inferencing. Both repetition and translation were reported almost equally by both successful and less successful listeners.

In conclusion, from a quantitative perspective, the major difference between successful and less successful listeners appears to lie in their reported use of metacognitive strategies, primarily comprehension monitoring. This ability to monitor is complemented by a facil-

TABLE 4

Mean Number of Strategies Reported by Gender and Listening Ability

Strategy	**Male** n=8	**Female** n=13	**Successful** n=10	**Less Successful** n=11
Planning	1.97	1.85	2.04	1.76
Comprehension monitoring	6.29	6.61	8.91	4.28
Self-evaluation	0.12	0.88	1.00	0.22
Problem identification	3.37	2.98	4.22	2.13
Metacognitive (Total)	**11.75**	**12.32**	**16.17**	**8.39**
Repetition	9.12	7.36	8.26	7.86
Grouping	0.13	0.19	0.13	0.63
Deduction/induction	1.30	0.49	0.26	1.28
Elaboration	21.39	20.56	19.71	21.93
Summarization	22.07	24.45	24.88	22.32
Transfer	8.01	8.90	6.49	10.44
Translation	9.13	9.73	9.56	9.45
Inferencing	16.04	15.29	13.62	17.36
Cognitive (Total)	**87.19**	**86.97**	**82.91**	**91.27**

(Number represents a percentage of total strategy use)

ity to pinpoint what needs more attention or greater clarification (problem identification).

Learning Style

It is reasonable to hypothesize a close relationship between cognitive style and pattern of strategy use (e.g., Ely 1989; Skehan 1991). Since the possibility of such a relationship between listening strategies and learning style had not previously been examined, each participant in this study was asked to complete the *Learning-Style Inventory* (LSI) (Kolb 1985). Scores were tabulated and plotted on a grid that placed each participant in one of four quadrants: 1) Type 1 learners: innovative, divergent intuitors; 2) Type 2 learners: analytical, assimilating intellectuals; 3) Type 3 learners: commonsense, convergent implementors; and 4) Type 4 learners: dynamic, accommodating inventors.

An analysis of the relationship between type of learning style and reported listening comprehension strategy use uncovered only modest differences in strategy use by learning style; however, considering the size of the numbers in the various cells and the sometimes considerable variation in reported strategy use within the same cell, it would not be justifiable to draw any conclusions. This observation is reported here in response to a claim by Oxford (1994) that often the relationship between strategy use and learning style is either 1) not examined or 2) not reported because, presumably, the results did not point to any meaningful relationship.

Discussion

As mentioned earlier, the preceding results should be understood as suggestive of trends and and patterns in strategy use. These results are not conclusive and must be interpreted as distinct possibilities that will need to be validated with a larger sample. The following discussion will attempt to explain the results within an information-processing framework (McLaughlin et al. 1983).

Language Proficiency

At the Novice level there appear to be significant shifts in the types of cognitive strategies reported from one sublevel to another; a more stable pattern of reported strategy use emerges at the Intermediate level. Novice I listeners report heavy use of elaboration, inferencing, and transfer in order to build meaning from oral texts. Because of their limited linguistic knowledge, they recognize very few words. They overcome this limitation by using what they do recognize: cognates from their first language (transfer) and contextual, extralinguistic cues such as background noise, tone of voice, and relationships between speakers (e.g., child talking to an adult) for inferencing purposes. The French/English words and other nonlinguistic cues have immediate meaning to the Novice I listener and are therefore processed automatically, without analysis in short-term memory (STM) (Eastman 1991). This allows Novice I listeners to allocate some attentional resources in STM to draw on world knowledge and life experience (elaboration), using top-down processes in guiding their interpretation (inferencing). Constraints on attentional resources do not allow Novice I listeners to do more. In fact, the qualitative analysis revealed that attempts at translation (bottom-up processing) interfered with the perception of additional semantic cues, a finding also noted by Eastman. The constraints on attentional resources may also explain the minimal report of comprehension monitoring at this level. As suggested by information-processing theory (McLaughlin, et al. 1983), Novice I listeners are struggling to cope with the rapid sound stream of authentic texts, and they may not be capable of simultaneously 1) holding in memory what they have already understood, 2) parsing new incoming input for more meaning, and 3) evaluating the congruency of the new information with the old. There appears to be very little room in STM for deeper processing strategies such as monitoring.

Novice II listeners do not appear to strongly favor any strategy. Report of elaboration, translation, summarization, transfer, inferencing, and repetition is more evenly distributed here than at any other sublevel. The sharp rise

of translation from Novice I is noteworthy. Novice II listeners are familiar with more words than Novice I listeners, but their lexicon may not be sufficiently internalized for automatic access to meaning in LTM. Therefore, as suggested by Eastman (1991), these listeners naturally feel compelled to translate, allocating precious attentional resources to this inefficient strategy. It appears that this level may be a period of instability in strategy use and that listeners begin to rely more on translation. This may suggest that the Novice II level is a pivotal period for strategy instruction, a finding also noted by Prokop (1989). If efficient listening strategies are not taught/learned before or at this level, students may either continue to experience frustration in language learning, or drop out.

The essential difference between Novice and Intermediate listeners is that Intermediate listeners report twice as many metacognitive strategies. Although both groups of listeners report using summarization, elaboration, and inferencing the most, the difference in the pattern of reported strategy use after these strategies is noteworthy. Whereas Novice listeners report using other cognitive strategies, such as translation, transfer, and repetition, Intermediate listeners report using metacognitive strategies such as comprehension monitoring, selective attention, and problem identification. As mentioned earlier, a shift in depth of processing may be an important distinction between Novice and Intermediate listeners.

The dramatic increase in the report of metacognitive strategies at this level may be explained by the composition of the sample: almost all successful listeners. Presumably, through time and necessity, Intermediate listeners have learned that success in listening and second language learning requires the directing control of metacognitive strategies. Concomitantly, learners who have not acquired these strategies have become frustrated and have withdrawn from second language study (a second language is not required in the jurisdiction in which the study took place). Prolonged language exposure has internalized many structures, routines, and words, allowing Intermediate listeners to process larger chunks of information and to allocate more attentional resources to monitoring (Shiffrin and Schneider 1977). The fact that inefficient surface-level strategies such as repetition, transfer, and translation have now been superseded by deeper processing strategies, lends further support to this claim.

Gender

Other than the modest difference in report of self-evaluation strategies by females, there appear to be few differences in reported strategy use by gender. This surprising finding differs from the findings of Phase I (Vandergrift 1996) and other studies comparing differences in general language learning strategies reported by males and females (e.g., Ehrman and Oxford 1989; Oxford, Nyikos, and Ehrman 1988). All of those studies, however, used retrospective self-report as a methodology. Even in the Bacon (1992a) study, subjects were asked a series of questions immediately after listening to the entire text, in order to elicit strategies and check comprehension.

Although it would be impossible to access the complete "online" thought processes of participants, the introspective methodology used in this study, reporting *while* listening, may come closer to revealing actual thought processes than previous studies on reported strategy use by gender. In fact, the present investigator discovered on a number of occasions that, in spite of the numerous pauses in the texts, an important moment in comprehension had occurred before the pause, but the participant could no longer recall what had happened.

How might the apparent difference between "*reported*" strategy use and "*actual*" strategy use be explained? Studies on gender differences tell us that females typically excel at verbal fluency; they have a stronger social orientation than males (Maccoby and Jacklin 1974); they rely heavily on verbal problem-solving strategies (Otten 1985); and they rely heavily on verbally and socially mediated approaches in their interactions (Halpern 1992). This, in addition to the tendency of males to

be less self-disclosing and of females to be conversation smoothers (Kramarae 1985), may explain why females *report* more strategies. Strategy *use* by gender definitely merits further study to examine the possible differences between reported use and actual use of learning strategies on a wide variety of language tasks.

Listening Ability

A quantitative representation offers only a superficial picture of the differences between successful and less successful listeners. It cannot capture *how* a strategy is used or *the particular combinations* of strategies that trigger meaning (Chamot et al. 1987). Neither can it capture the effective use of a strategy, such as the accuracy of an inference, an appropriate connection to prior knowledge (elaboration), or depth of summarization. For example, in the protocols provided below, although the quantitative difference in use of summarization by Julie and Evan is only a modest four per cent, their understandings of the text are qualitatively different, a finding also noted by Bacon (1992b) for her subjects. A qualitative analysis of representative protocols reinforced the quantitative results by pointing to the integral role of metacognitive strategies. In addition, differences became apparent in the effective use of world knowledge, use of prediction skills, quality of inferencing, and timing and depth of comprehension monitoring.[3]

The following protocols and discussion illustrate the difference in approach used by Julie (an unsuccessful listener) and Evan (a successful listener). Both are in their second year of French, although Julie is repeating the course. They are listening to an advertisement about a new magazine for young people called *Formidable*.

C'est une annonce spéciale. Attention les jeunes! *Formidable!* fait ses débuts! Vous attendez ce magazine depuis longtemps, et le voilà enfin!

Julie: Eh, he is talking to les jeunes, I guess, younger people, he is saying Attention which is listen.

Int.: Mmm,

Julie: Eh, a magazine, for children..

Int.: So what is going through your mind? What are you thinking now?

Julie: The thing is, I guess, a magazine for younger children, and children, that's all I got.

Evan: He is asking for the attention of all the young people, attention les jeunes;

Int.: O.K.

Evan: He says something about attention to the youth or something.

Int.: So, what are you thinking?

Evan: He just wants to talk about something that appeals to young people, I didn't get it.

Int.: O.K., no ideas what it is that he is getting at?

Evan: No.

Both listeners use bottom-up processing to quickly cue into the audience for this particular text, but only Julie has understood at this point that it is a magazine. Even though Evan missed the word "magazine," his protocol demonstrates an awareness of the type of text that this might be and what he has to listen for (problem identification). Julie's protocol indicates evidence of surface processing; i.e., translation.

Aujourd'hui, chez votre marchand de journaux, vous trouvez *Formidable!* le magazine fait spécialement pour vous, les jeunes.

Julie: Something about a special, it's for, I know he said vous in there, so that must mean for just about everybody.

Int.: Uh, uh.

Julie: That's really all I can tell.

Evan: Something about a magazine, he is trying to plug in on a magazine for young people.

Int.: How do you know that?

Evan: Well, maybe a store; a magazine, could be in a store too.

Int.: What are you thinking about that?

Evan: I'm trying to think about a store for youth, I don't know. For young people, I don't know.

Evan now quickly identifies that a magazine is the subject of the text. On the other hand, Julie just focuses on the "special" (transfer from spécialement) and further surface processing (analysis of "vous"); she does not tie this in with earlier information. Evan considers the possibility of the often-confused "magasin/magazine," checks out the plausibility of both, and decides that there is not yet enough information to make a definite decision (comprehension monitoring).

Dans *Formidable!* on vous parle de vos personnalités préférées—chanteurs, groupes, vedettes de cinéma et de la télé, athlètes, etc.

Julie: He is saying there's like great conversation, parle, that's speaking so, there's movies, tele fund-raising, that must be magazine, so I got that. Like listings to movies, conversations, that's about all I got.

Evan: It's specially suited, I think it's a magazine especially suited for the athletes, the singers and there is something for every one in it.

Int.: Uh huh.

Evan: It says prefer, préfère is prefer.

Int.: Uh, uh.

Evan: What you prefer, singing, athletes, or acting. Athletes, or athletic groups.

Both listeners have used cognates such as télé, athlèthes, cinéma (transfer) to elaborate further on their understanding. Although Evan, like Julie, engages in some surface analysis here (prefer=préfère) he is still focused on what this text is about (top-down processing); he appears to have decided that it concerns a magazine. On the other hand, Julie appears to be heading off into tangents. With no solid conceptual framework into which she can fit new information, Julie lacks the sense of direction necessary for differentiating between information that is congruent or incongruent with the framework. Therefore her summarization, which contains elements of truth, is incomplete and disjointed.

Beaucoup de bons articles, de belles photos, et de bandes illustrées.

Julie: With great photos, and articles, well...

Int.: So what are you thinking?

Julie: Eh, he is talking, I don't know, about like a magazine for young people I guess they can get involved with maybe, I'm not really sure.

Evan: Yeah, there is good photography in it, so I think altogether he is kind of selling this magazine to young people, and trying to make it appeal to young people because there is all kind of things in it interesting to young people.

Both listeners appear to be trying to tie things together. Julie is back to her magazine schema but does not seem too certain about it. Julie's apparent lack of self-confidence (manifest in all three sessions) may explain her hesitant and passive approach. Evan has now clearly decided that this is a promotional offer for a magazine for young people. This allows him to confidently interpret the upcoming input within the conceptual framework that he has activated and verified.

Il y a des coupons pour des offres spéciales et un concours à tous les mois. Ce mois-ci vous pouvez gagner un voyage au Carnaval de Québec!

Julie: I guess there is a trip to the Carnival in Quebec, so maybe it is like something for them to enter a date, to write, or draw,

Int.: How do you know that?

Julie: Eh, because just by the way he explained to them what can be done so I guess if they write an article or draw a picture or I don't know what else.

Int.: Mmm, mmm.

Julie: Maybe they can win a trip to the Carnival or something if that's what they write about.

Int.: Mmm, mmm. Anything else going on in your mind?

Julie: No.

Evan: There is coupons in it for special offers, I heard that, and there is contests in it, that you can win a trip to the Quebec Carnival, gagner, for to win.

Int.: How do you know there's a contest?

Evan: Well, something, he said something about you can win a trip to the Quebec Carnival.

Int.: So ..

Evan: So, this magazine has all these things in it and he's just trying to make it interesting.

Evan continues to systematically accommodate the new information into the conceptual framework he established earlier. Even though he does not know the word for contest (concours), he is able to infer its meaning on the basis of the schema and new linguistic input. Meanwhile Julie appears to have forgotten about the idea of a magazine and just attempts to understand what she presently hears without connecting it with what she already knows. Using the jigsaw puzzle metaphor (Long 1989), Julie has lost the sense of the overall picture (the final product) so that she no longer knows where to fit the pieces that she is able to comprehend. Cognitive style may also help to explain the difference in approach that is evident at this point. Julie may be too field-independent, failing to perceive the whole picture, whereas Evan may be more field-dependent, allowing him to sort out the pieces without losing track of the whole picture.

Et *Formidable!* n'est pas cher! Seulement 1,50$ par mois. Oui, c'est vrai, mes amis! Vous ne payez que 1,50$ par mois. Formidable? Oui, c'est *Formidable!*

Julie: He is saying that's true. I guess they were talking about that before, that's really great, and it's true, it's great, that's what I caught the second part, the ending.

Int.: Mmm. Anything more that you think is going on in your mind about this thing?

Julie: No.

Evan: Well, the magazine is $1.50, and this person, he's trying to sell it to, I don't know if he's like accepting it or not, I heard a couple words that I didn't quite understand, like after he said 'Formidable' and I missed the word after that.

Int.: Uh, uh. Any more ideas? ... No?

These final protocols reinforce what has already been noted. Although the price is repeated, Julie does not pick up on it. This may be due to a deficient conceptual framework and/or an inability to anticipate the logical components of a magazine advertisement. Therefore, Julie just picks up on individual words ("vrai" and "formidable"), but never really interacts with the text as a whole. On the other hand, Evan picks up on the price as a natural component of a promotional offer and even speculates (selective attention) on whether the offer will be accepted, hinting that that may be the meaning of the words he did not get (problem identification).

In conclusion, the verbal reports of Julie and Evan demonstrate sharp differences in depth of interaction with the text. Successful listeners like Evan are able to use their world knowledge more productively, relating the text to their own experience. There is less shifting between potential frameworks of interpretation and a greater ability to rapidly suppress irrelevant information, so that listeners do not lose previously comprehended information (Gernsbacher et al. 1990). Meaning is accumulated as new input interacts with previous knowledge and the expectations generated by the conceptual framework. This allows successful listeners to devote attentional resources to a continuous cycle of metacognitive activity involving comprehension monitoring, further prediction of new information, and monitoring again (O'Malley, Chamot, and Küpper 1989). Effective linking of strategies fosters efficient cognitive processing and produces protocols that are characterized by rich, coherent, and comprehensive summarization in contrast to the more superficial, disjointed, and incomplete summarization by less successful listeners.

Less successful listeners like Julie experience difficulty because they squander precious time and attentional resources on inefficient surface processing strategies such as translation (Eastman 1991). Translation takes more time and attentional resources and builds less meaning because it involves surface mapping between languages, and generally fails to activate conceptual processes (Swaffar 1988). This results in frequent shifting of conceptual frameworks, inadequate suppression of irrelevant information, and rapid fading of recently comprehended information (Gernsbacher et al. 1990). The result is an incomplete and disjointed understanding of the text. Less successful listeners lack the regulating control of metacognitive strategies to help them focus on meaning. Without a conceptual framework and a direction provided by anticipation, listening efforts become aimless, resulting in haphazard deployment of strategies that generate only isolated parcels of meaning.

Pedagogical Implications

Because it is done in real time, listening is perforce a selective process. *What* listeners decide to select for processing is crucial for successful comprehension. Evidence from this study would indicate 1) that metacognitive strategies play a key role in what success-

ful listeners choose to select for processing and 2) that the beginning two years of language learning may be pivotal in acquiring these strategies and in fostering successful language learning. A pedagogical sequence that guides students through the listening process may be most suitable for nurturing the development of metacognitive awareness and the acquisition of metacognitive strategies in three categories: planning, monitoring, and evaluating. Since many students already appeared to be familiar with a number of planning strategies, special emphasis should be placed on activities that nurture monitoring and evaluating. A teaching framework for listening tasks (e.g., Glisan 1988; Duplantie and Massey 1984; Underwood 1989) can guide students through the mental processes for successful listening comprehension.

Teach Students to Plan for Listening

Prelistening activities are crucial to good second language pedagogy. During this critical phase of the listening process, teachers prepare students for what they will hear and what they are expected to do. First, students need to bring to consciousness their knowledge of the topic, the organization of the information in the text, and any relevant cultural information. Second, a purpose for listening must be established so that students know the specific information they need to listen for and/or the degree of detail required. Using all the available information, students can make predictions to anticipate what they might hear. Prelistening activities can help students make decisions about what to listen for and, subsequently, to focus attention on meaning while listening.

Teach Students How to Monitor Their Comprehension

During the listening activity itself, students continue to monitor their comprehension and make decisions about strategy use. Students need to continually evaluate what they are comprehending for 1) consistency with their predictions and 2) internal consistency, i.e., the ongoing interpretation of the oral text or interaction. Teacher intervention during this phase is virtually impossible because of the ephemeral nature of listening. Periodic practice in decision-making skills and strategy use can sharpen inferencing skills and help students to monitor more effectively. Strategies to be practiced include: logical inferencing and appropriate use of world knowledge (elaboration) (see Mendelsohn 1994), cognate awareness and word derivation skills (see Cashman 1990).

Teach Students to Evaluate the Approach to, and Outcome of, Their Listening Efforts

Students can evaluate the results of decisions made during a listening task. The teacher can encourage self-evaluation and reflection by asking students to evaluate the effectiveness of strategies used. Group or class discussions on the approach taken by students can also stimulate reflection and valuable evaluation. Students should be encouraged to share individual routes leading to success; e.g., how someone guessed (inference) the meaning of a certain word or how someone modified a particular strategy. Focusing on the *process* as well as the product of listening can help students to reflect on their learning and can encourage them to consciously adjust their strategies.

In order for students to develop successful listening strategies, it would appear wise for teachers to work within this framework during the first two years of language learning, at least. At Novice levels, the teacher needs to act in a metacognitive role for the students, discouraging a reliance on language decoding in favor of cues that encourage top-down processing strategies. As students move beyond the Novice level, teachers gradually transfer to the student their metacognitive role and serve in a facilitating role instead.

This study has demonstrated that Novice I listeners can comprehend the gist of authentic texts without any advance preparation.[4] Therefore, listening practice with authentic texts is possible at early stages of language learning.[5] These texts, however, must relate to the life experience of the students and contain

appropriate characteristics to facilitate comprehension at this level. The fact that Novice I listeners could not translate phrases and were obliged to focus on every semantic cue available to them, indicates that a top-down, meaning-based approach can be successfully used at this level. Such an approach needs to be nurtured through a subsequent period when listeners may feel compelled to translate and use less efficient bottom-up strategies. This calls for ample opportunities for guided practice in listening so that deployment of appropriate metacognitive strategies becomes automatic, before, during, and after the listening activity.

NOTES

[1] This paper reports on part of a larger study (Vandergrift 1992), parts of which have already been presented at the Second Language Learning-Foreign Language Acquisition (SLA-FLL) Conference, Purdue University, February 1993 and the 10th World Congress of the International Association of Applied Linguistics (AILA), Amsterdam, August 1993. The author gratefully acknowledges financial support, in part, from the Social Sciences and Humanities Research Council of Canada (SSHRCC Award No. 792-91-0349). He also wishes to thank Andrew Cohen and other anonymous reviewers for their careful reading of this manuscript and their suggestions for improvement. Any errors or omissions remain the responsibility of the author alone.

[2] For purposes of this research, the term "authentic" is used to refer to oral texts that "... reflect a naturalness of form, and an appropriateness of cultural and situational context that would be found in the language as used by native speakers" (Rogers & Medley 1988, 468).

[3] For a more in-depth qualitative analysis of protocols of listeners at different levels of language proficiency, see Vandergrift (in press).

[4] This does not mean, however, that one should not prepare students for a listening task. If students in this study could successfully comprehend the gist of an authentic text without any preparation, appropriate preparation activities should help them to attain an even more detailed level of comprehension.

[5] This is not to suggest that listening practice at this level would involve exclusive use of authentic texts. In order to develop confidence and to provide students with input that contains structures slightly beyond their level of competence, listening comprehension instruction at this level will also involve extensive teacher talk supported by concrete referents and actions/gestures to facilitate comprehension.

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