Language Teaching Research **2,2 (1998); pp. 124–147**

How ESL learners with different listening abilities use comprehension strategies and tactics

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This article presents findings from research into listening strategies and tactics of ESL learners from the People's Republic of China studying on an intensive English language and academic skills programme in a university in Singapore. This research makes a distinction between strategies and tactics, with the term 'strategy' referring to a general approach and 'tactic' meaning a specific action or step. In this article I identify the cognitive and metacognitive strategies and tactics used by 16 ESL learners, and compare the way high- and low-ability listeners applied them. I specifically examine the frequency and the types of strategies and tactics used. To find evidence of these cognitive processes, retrospective verbal reports were analysed. The study showed that the high-ability listeners used more strategies and tactics than the low-ability ones. They were also able to vary their application of tactics within each strategy. Both groups used more cognitive strategies and tactics than metacognitive ones, but the low-ability listeners were particularly poor at it. In addition to reporting the results from the study, the article also discusses issues related to using verbal reports as data and training learners to use listening strategies.

I Introduction

This article describes a study of the use of cognitive and metacognitive strategies among high- and low-ability listeners. In this section, I explain the difference between the terms 'strategy' and 'tactic', and define cognitive and metacognitive strategies. The study that I conducted is outlined at the end. Subsequent sections

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 1362–1688(98)LR023.OA

present the theoretical framework for the methodology used, procedures for collecting data and finally a discussion of the results and their implications.

Previous studies have been successful in identifying listening strategies that language learners use (Conrad, 1985; Wolff, 1987; O'Malley *et al*., 1989; Rost and Ross, 1991; Bacon, 1992; Vogely, 1995; Rost, 1994, Young, 1996). They have also informed us about the differences in strategy use between effective and less effective listeners. Nevertheless, there is still a great deal to be discovered about these differences, not just quantitatively but also qualitatively. For example, are there subtle differences between two learners who both report using inferencing as a strategy? Examining more closely the tactics used by learners with different listening abilities can provide us with answers.

In making a distinction between *tactic* and *strategy*, I am following Schmeck (1988), who highlights how this distinction 'draws attention to the dimension of behavioural specificity–generality' (1988: 171). Whereas the term 'tactic' refers to specific activities or steps, 'strategy' refers to a more general approach. As Schmeck observes, this is consistent with military usage: 'tactics operationalize strategies, i.e., tactics are the observable activities that imply that certain strategies are in use' (1988: 171). By accounting for this dimension of specificity–generality, we are better able to understand the strategic approach as well as individual comprehension processes that occur during listening. Thus, when we report the use of a certain comprehension *strategy*, we are saying that a particular approach has been taken. However, when we identify the *tactics* used, we are describing the actual steps taken to assist or enhance comprehension. In the case of listening, when learners use the context to infer the meaning of a word, or they infer the meaning of a word by remembering another word that sounds like the original, we know they are using the strategy of inferencing.

Although a great deal has been written about cognitive and metacognitive strategies, a definition of each strategy is perhaps necessary for readers who may not be familiar with the distinction between the two. Cognitive strategies are more directly related to a learning task and involve direct manipulation or transformation of the learning materials (Brown and Palincsar, 1982; O'Malley and

Chamot, 1990). Language learners use cognitive strategies to help them process, store and recall new information. For example, in listening and reading, learners infer the meaning of difficult words or ideas to facilitate their comprehension of the text. Cognitive strategies involve doing things with the incoming information, often with the help of existing knowledge from long term memory. Metacognitive strategies, on the other hand, do not process input directly. They go beyond cognitive manipulation and transformation of incoming information. According to Brown *et al.* (1983), metacognitive strategies include the three fundamental executive processes of planning, monitoring and evaluating. Metacognitive strategies, therefore, involve thinking about the way information is processed and stored, and taking appropriate steps to manage and regulate these cognitive processes. Metacognitive strategies are just as important, if not more important, than cognitive strategies (Wenden, 1987; Oxford, 1990; Paris and Winograd, 1990). An example of metacognitive strategy is selective attention during listening, by which the listener decides in advance which aspects or parts of the input to pay attention to.

In my study, I used introspective methods to gather data from language learners. The verbal reports that learners made during a listening task and the entries they made in listening diaries were analysed to find evidence of cognitive and metacognitive strategies and tactics being used. The next section discusses some of the issues involved in adopting an introspective methodology.

II A framework for verbal reports

Introspection or the use of verbal reports has become increasingly popular in listening strategy research. According to Ericsson and Simon (1987: 43), introspection refers to a process by which individuals report on the mental steps they take or the mental images they see when carrying out a task – the 'observation of the contents of one's mind'. In listening research, subjects are typically asked to listen to a selected text and then 'think aloud' to report the strategies they used to assist their comprehension. Studies which have made use of this method include O'Malley *et al.* (1989), Bacon (1992) and Young (1996).

When using verbal reports, it is crucial to adopt a robust

framework for eliciting and interpreting the data. In the study reported here, I used the framework proposed by Ericsson and Simon (1980, 1993). This framework was based on a theoretical model of processing that accounts for the quantity and kind of information that can be retained by subjects. The processing model also specifies the conditions for accessing this information and reporting it verbally. These conditions are:

1) Information recently heeded by the central processor is kept in short term memory (STM) and is directly accessible for producing verbal reports. Since STM has a limited capacity, only the most recently heeded information is accessible directly.
2) A portion of the contents in STM is fixated in long term memory (LTM) before being permanently lost from STM, and this portion can, at later points in time, be retrieved from LTM. After retrieval, this 'old' information must be transferred to STM before it can be reported. (Ericsson and Simon, 1993: 11)

The model accepts that there will be incompleteness in the verbal reports under three conditions: information is not heeded, not all heeded information is reported, and inadequate retrieval from LTM. However, Ericsson and Simon (1980: 243) assert that 'incompleteness of reports may make some information unavailable, but it does not invalidate the information that is present'. Ericsson and Simon argue that this model is simple yet robust, 'compatible with a wide range of alternative assumptions about human processing' (1993: 10).

Ericsson and Simon (1980, 1993) have proposed two types of verbalization. The first type is *concurrent verbalization* – 'think aloud' or 'talk aloud'. This happens at the same time that the information is being attended to. The second type, *retrospective verbalization*, reports cognitive processes that have occurred at an earlier point in time. In the study reported here, all the verbal reports were retrospective verbalizations.

Ericsson and Simon make a distinction between direct articulation or explication of the stored information (in STM or LTM), and the product of intermediate processes such as abstraction and inference (1980, 1993). They caution against the use of inappropriate probes when eliciting verbal reports. To get an accurate picture of cognitive processes, a researcher has to avoid

two kinds of probe. The first kind asks subjects to explain the reason for doing something that the researcher has observed. This does not require the subjects to describe their cognitive processes, but rather generate answers based on their knowledge. The second kind of probe to avoid is a question about a hypothetical state. As with the first type, subjects are not being asked to report on what happens. Rather, they are being asked about their beliefs and perceptions.

All this has serious implications for interpreting data. In this study, only reports on actual cognitive processes were considered when identifying strategies and tactics. Comments about listening in general or in hypothetical situations were interpreted as metacognitive knowledge (Flavell, 1979; Wenden, 1991), not as strategy use.

There have been criticisms against verbal reports as data ever since the method was first used in the late 19th century in psychology experiments. By setting out the conditions in which data should be collected and interpreted, Ericsson and Simon have made a strong case for the use of verbalizations or introspection as a valid and reliable research procedure. Criticisms against introspection have also come from within the field of second language research, the most notable being Seliger's (1983) argument that language learners cannot take on the role of linguists in providing information about learning processes. He follows White (1980: 105) in asserting that consciousness 'is limited to the products of mental processes and the processes themselves are beyond the reach of introspection'. Thus, Seliger concludes that 'the conscious introspections of language learners are really the product of underlying processing and not the process itself' (1983: 187). He adds that there are other problems such as the short memory span of subjects who have to function in another language and the risk of subjects making inferences about what they did.

Nevertheless, the use of introspective methods has gained wide currency in second language research (Færch and Kasper, 1987; Matsumoto, 1993). There are a number of reasons for the increasing popularity of verbal reports. First, the importance of learner strategy research has created a need for procedures which can obtain data about what learners know and do. This information is not normally accessible to researchers directly, but it can be

made available to them when learners are asked to introspect and report (Wenden and Rubin, 1987). More importantly, there are strong arguments supporting the role of consciousness in language learning (Schmidt, 1990; McLaughlin, 1990; Johnson, 1996), which implies that learners can be aware of their learning processes. Another important reason for introspective reports gaining respectability as a research method has to do with the steps being taken to improve research designs and write-ups so as to avoid the pitfalls associated with verbal reports (Matsumoto, 1993; Cohen, 1996). Seliger's (1983) criticisms about using verbal reports as data were largely a response to design weaknesses in some early studies on learners' introspection. With improved research design, introspection can be used in both qualitative, exploratory and quantitative, hypothesis-testing research, as Grotjahn (1987) has convincingly argued.

III The current study

I have been conducting research into listening comprehension among a group of ESL learners from China who are studying in Singapore. One of the aims of this research has been to identify comprehension processes that take place during second language listening. The results reported here are answers to these two questions:

1) What listening comprehension strategies and tactics do ESL learners use?
2) Are there any similarities in the use of these strategies and tactics among learners of different listening abilities?

In this section, I describe the subjects of the current study, the procedures for collecting data and the coding method used in interpreting the data.

1 Subjects

The subjects were all students from the People's Republic of China. The students were studying on a six-month intensive language and academic skills programme at the National Institute of Education of Nanyang Technological University, Singapore. The

average age of the students was 19, with six years of previous English study in Chinese middle schools.

All the students on the programme take the Secondary Level English Proficiency Test or SLEP (Educational Testing Service, 1991) which is used to measure their listening and reading comprehension. It contains a total of 150 multiple-choice questions, 75 for each skill. The listening component tests a wide range of listening skills, such as listening for gist, listening for details and making inferences. The input is in the form of single sentences, short passages and conversations. This test is administered twice: first, as a pre-instruction assessment at the beginning of the programme and, second, 24 weeks later when the programme finishes.

2 Procedure

a Selecting and grouping subjects: **For the purposes of this study, 16 subjects were selected from the 80 students studying on the programme. The results from the SLEP post-test were used to form two groups of different listening abilities. Eight subjects whose converted listening scores were in the top 30% of the 80 students formed the high-ability group. The low-ability group consisted of eight students from the bottom 30%. The listening ability of those students selected was further confirmed by their overall performance in terms of improvement from pretest scores and their final exam scores in lecture comprehension.**

b Gathering data: **By asking subjects to produce retrospective verbal reports about their listening, I was able to collect data on listening strategies and tactics. I elicited verbal reports from the subjects using two methods: interviewing subjects to encourage immediate retrospective verbalization after short listening texts, and reviewing entries that subjects made in listening diaries.**

To gather the verbal report data through interviews, I used the following procedure. First, two passages of similar length (about 250 words) and language level were selected. These passages were transcripts of recordings made of individuals talking about common topics. The language in the passages was therefore consistent with that of everyday spoken English. Before meeting

the subjects, I divided each passage into short segments.

I interviewed each subject in my office for about 30 minutes. After welcoming each subject, I started the interview with about five minutes of warming-up conversation during which I chatted with them in general terms about second language listening. This was followed by a 'trial run'. The aim of the trial run was to give the subject an idea of how and what they should be reporting. I explained that they would hear a short passage in English, and that they should tell me how they listened and understood the passage. After the trial run, which lasted no more than five minutes, I proceeded with one of the two passages, which I selected randomly. I read it part by part to the subject. I paused after each part and asked the subject to tell me how he or she had tried to understand what was heard. The subject's responses were recorded on a tape recorder, transcribed and coded.

Immediate verbalization as described above is a similar technique to the one used by O'Malley *et al*. (1989). However, I did not train the subjects to 'think aloud'. I was concerned that such training would alert them to particular strategies and tactics that might be perceived as desirable or as ones that I wanted to identify. Training, therefore, could lead to two problems. First, the students might report 'desirable' strategies or tactics during the actual data collection session even though they did not normally use such strategies. Second, training might also lead them to verbalize thoughts that did not represent their mental processes but which they thought I might want to hear. Buck (1990) found that training subjects to verbalize did not make much difference apart from clarifying procedures. It was for these reasons that I decided each subject would be given a trial run before listening to the test passage, instead of a training session.

Apart from producing these direct verbal reports, subjects were also asked to write a weekly account of their listening activities for a period of 8 weeks. They were instructed to note down how they had tried to understand what they heard as soon as possible after every listening activity. Subjects also wrote about their perceptions and beliefs related to learning to listen in English, and about how they developed their listening skills outside class. The subjects had a choice of writing in Chinese, but chose to write in English instead. Because they were already used to writing essays of

between 500 and 800 words in length, expressing themselves in English was not a problem.

The difference between the two data collection methods used in this study is the interval between listening and reporting. For the former, this interval was almost immediate, whereas for the latter it could be a few hours or more. In other words, verbalizations during the listening passages drew directly on heeded information in short term memory, whereas entries in listening diaries were first retrieved from long term memory with a resulting loss of some information.

c Coding data: Individual tactics were firstly broadly categorized as either cognitive or metacognitive. Once these cognitive and metacognitive tactics had been identified, they were then further categorized using terms found in established taxonomies of learner strategies (Rubin, 1987; O'Malley and Chamot, 1990; Oxford, 1990). For example, the tactics 'guessing the content of the text from its title' and 'anticipating details during listening' are cognitive tactics. They were grouped under the heading 'prediction strategy'. Although most of such terms were taken from the learner strategy literature, the individual tactics identified under each strategy are often unique to listening.

Once tactics and strategies had been identified, the total number of occurrences for each strategy and tactic were tallied. Any item reported more than once by the same student was counted as one occurrence so as not to exaggerate the final total.

I took specific measures to improve reliability of the coding. One was to select and interpret the data according to the conditions specified in Ericsson and Simon's framework (1980, 1993), which has been discussed in Section II. Another measure was to put the results of my coding aside for about five months. Then I coded the data again. The code-recode agreement was 88%. The reliability of the codes was further confirmed by an independent coder.

IV Results and discussion

Subjects' immediate retrospective verbalizations yielded a great deal of interesting data because they introspected as soon as they stopped listening and were therefore able to examine what was still

in their STM. Their listening diaries provided less (yet still useful) data on listening strategies. The rest of this section presents the strategies and tactics that I identified.

To compare the results for the two ability groups, I looked at the tendencies in subjects' strategy usage using frequency counts and means. If five or more subjects reported a strategy or tactic, then this was counted in the analysis as being a majority usage. Due to the small number of subjects in each group, I did not calculate statistical significance. Despite this, the findings could provide useful insights into the cognitive characteristics of learners with different listening abilities.

1 Listening strategies

Table 1 presents those cognitive and metacognitive strategies identified by the majority of the students in each group.

a Cognitive strategies: **The high-ability listeners used six cognitive strategies. Of these, four are top-down: inferencing, elaboration, prediction and contextualization. All these strategies require the listener to draw on their prior knowledge.**

When *inferencing*, listeners fill in missing information, such as

Table 1 Listening strategies used by the majority of high- and low-ability listeners (H and L)

	H	L
Cognitive strategies		
• Inferencing	✓	✓
• Elaboration	✓	✓
• Prediction	✓	–
• Contextualization	✓	–
• Fixation	✓	✓
• Reconstruction	✓	✓
Metacogntive strategies		
• Selective attention	✓	✓
• Directed attention	✓	✓
• Comprehension monitoring	✓	✓
• Real-time assessment of input	✓	–
• Comprehension evaluation	✓	–

meanings of unfamiliar words and parts of a text that they cannot hear clearly. This type of inferencing has been referred to as bridging inference (Clark, 1977). Five tactics were identified. These included using context, key words, knowledge about the world, knowledge about English, and speaker's body language and visual aids. For example, when Hongling did not understand the meaning of the word 'hump' in a passage about camels, she used the context and her knowledge about the world to correctly infer its meaning:

> **. . . the article talk about how camel can store food. So I think the hump means 'tuo feng'.**

Elaboration **is also an inferencing process (Eysenck and Keane, 1995), but unlike bridging inferences, elaborating inferences relate new information to existing knowledge to produce a more complete interpretation. Elaboration also refers to the process by which listeners embellish an interpretation with details to make it more meaningful to them. The tactics used by the subjects were applying knowledge about the world and applying knowledge about English. The most convincing instances where elaboration with world knowledge took place were when students included information that was not in the listening text. Such was the case with Xiaotung's verbal report:**

> **I also have difficulty in details, er . . . can I repeat the contents of some of the sentences? . . . It's not a store of water, but it's got hard fat, it store food, for maybe around one month.**

Although the passage did not mention the length of time the camel could store food in its hump, Xiaotung had included 'maybe around one month'.

Prediction **enables listeners to anticipate the next part of a text, such as a word, a phrase or an idea. One tactic is to predict the contents from the title or topic before listening. The other is to anticipate details in the next part while listening. Yufeng, for example, tried to predict what the next part of the text was going to be when he heard the key word 'hump':**

> **Because in the first sentence it says the hump. And I remember that usually the camel has two humps and maybe the next sentence is on what the use of the hump, what's the importance to the camel, so it also can helps me to understand.**

The fourth strategy, *contextualization*, refers to the attempts to relate new information to a wider context or situation in order to produce an acceptable general interpretation of it. One tactic is to place a topic or key word in a familiar context as soon as it is heard before attempting to process the rest of the message. Another is to relate what is heard with something from an earlier part of the message. A third tactic is to put difficult words or concepts in a familiar context to derive some general sense of the meaning. Xiaorui, for example, talked about a picnic organized by some friends from church:

> **At last, they prayed for us. I can know the main idea that they thanked God to let us play together, to give the beautiful park to us, to give the good weather. Still, some sentences I couldn't catch. I guessed some of them may be the typical sentences in bible.**

Besides these four strategies, the high-ability listeners also used the strategy of *fixation*. The word is used here in a nonpsychological sense. It refers to paying close attention to one small part of the spoken text in order to understand it. The subjects often did this by searching for the spelling or the meaning of the word, as in Zhihao's case:

> **And I repeat the sentence in my mind. . . . And think about what's the meaning of 'reserve'. Ahm, reserve, reserve . . .**

Other tactics included repeating or memorizing the sounds of unfamiliar words or complete phrases so that these could be processed later. Although fixation was a popular strategy among learners in both groups, it was not particularly useful for assisting comprehension. Learners like Liu Yee do realize that these attempts were often quite futile:

> **Sometimes I try to remember it. At first I can remember it, but after the whole dialogue is finished I want to remember what I can remember just now, but I can't remember at all.**

The sixth strategy that the high-ability listeners used was *reconstruction*. This involves using words from the text and sometimes background knowledge to construct the meaning of the original input. Reconstruction is not synonymous with recombination (O'Malley and Chamot, 1990:120). The product that is constructed from combining the words heard in an utterance is

not limited to just 'a sentence or larger language sequence'. Instead, it can be in the form of a mental representation of what is heard, or even mental images. Reconstruction is a complex activity and appears to involve both top-down and bottom-up process. Xiaozheng reports:

> **Er, first I listen to the word, words, and the whole sentence. And I try to catch the word that I . . . very easy to understand, and to . . . connect them, such as the food, and the store . . . get the . . . get the meaning.**

As we have seen, the majority of the high-ability listeners used six cognitive strategies. However, of these six, the low-ability listeners used only four. Two of these were top-down strategies, namely inferencing and elaboration. Their repertoire of top-down strategies was limited to mainly inferencing processes. They did not use prediction and contextualization, which were used quite extensively by the high-ability listeners. However, like those listeners, they also used fixation and reconstruction quite extensively.

b Metacognitive listening strategies: **The high-ability group used five metacognitive strategies: selective attention, directed attention, comprehension monitoring, real-time assessment of input, and comprehension evaluation. *Selective attention* means paying attention to specific aspects of the input. Tactics identified were listening for gist, listening for familiar or key words, noticing the way information is structured, listening for repetition, paying attention to meaning in groups of words, and to heeding intonation. One example of listening for gist was when Liu Mei heard the unfamiliar word 'adiposity':**

> **I heard it, but I just try to get the main idea of the whole sentence so I didn't pay attention to it.**

Directed attention **is concentrating on the input and avoiding distraction. It is different from selective attention, which only focuses on specific aspects. The tactics used were: maintain concentration as much as possible, listen closely to every word, and continue listening in spite of problems. Here's an example from Pan Ke's listening diary:**

> When I listened to the calculus lecture, I noticed that it became clearer and easier to understand. When I concentrated my energy on his lecture, I can understand most of it.

Comprehension monitoring is the process of checking and confirming how well one understands the input during listening. The listener notices possible errors in inferences and confusion or incoherence in different parts of the interpretation. This strategy is the basic aspect of monitoring – noticing when a reasonable interpretation has taken place. Listeners can apply tactics that make use of both external and internal resources. These include information in the text, visual elements, context and prior knowledge. Xiaohua, who heard someone talking about a conversation in a hospital, realized that her interpretation was inaccurate:

> At first I heard 'died', so I thought the lady was dying, as I listened on, she said she asked me how old was your son! (*Laughs*) So I thought it was impossible that she was dying!

The strategy of *real-time assessment of input* enables the listeners to decide whether a particular part of the input is necessary for achieving their comprehension goals. It takes place during listening and involves making on-the-spot decisions about the value of different parts of the input. The most common tactic among the high-ability listeners was to determine the potential value of unfamiliar words. They assessed whether a word they had just heard was important to the rest of the text. For example, Xinmei heard a segment on the advantages of the camel's hump. There were a few words that she did not understand although she could repeat the sounds:

> Inconvenient, soggy or these words I don't know but I think even if I don't understand it doesn't matter. . . . Because I think as long as I know it's a disadvantage the total meaning, I don't need to know the specific.

Real-time assessment of input is a monitoring strategy because it involves noticing problems during listening and deciding what to do about them. It can help listeners redirect their attention to the task at hand and not be fixated.

The last strategy that the better listeners used extensively was *comprehension evaluation*; that is, determining the accuracy and

completeness of their comprehension. Comprehension evaluation is not the same as comprehension monitoring although both gauge the correctness of what is understood. Whereas comprehension monitoring takes place almost concurrently with listening to other parts of the text, comprehension evaluation can be done at any time after an individual has finished listening and arrived at some tentative interpretation. The purpose is to check to what extent the understanding is acceptable. The following extract from an interview is an example of comprehension evaluation. Xiaohua (X) was giving the gist of what she had heard:

X: Um, at times, I think if you don't enjoy yourself, you just get boring and she continues to say that people who go out fishing is quite dark? (*laughs*)
G: Why do you laugh?
X: Um because I know that go out fishing is not so right!
G: What do you mean by 'not so right'?
X: It's not the thing she has been talking about it.

Unlike the high-ability listeners, who used all five strategies described here, low-ability listeners used only the first three, namely selective attention, directed attention and comprehension monitoring.

2 Listening tactics

a Frequency and means: **There is a clear difference in the number of listening tactics students in each group used. Whereas the high-ability listeners used a total of 156 tactics, the low-ability group used only 64% of that. Moreover, high-ability listeners consistently used more tactics in both cognitive and metacognitive approaches. Both groups shared one similar characteristic, however. They reported using more cognitive processing tactics than metacognitive ones. The figures showing the frequency and means of listening tactics are presented in Table 2.**

b Types: **In order for us to understand better the more subtle differences in strategy use between the two groups, I will now examine those listening tactics each group has used. In this article, I have selected only those tactics used by the majority (five or more) of the high-ability listeners, and compared the frequency of use between the two ability groups. The high-ability listeners**

Table 2 Frequency and means of listening tactics in both high- and low-ability groups (H and L)

	Cognitive		Metacognitive		Both	
	Total	Mean	Total	Mean	Total	Mean
H	88	11.0	68	8.5	156	19.5
L	55	6.9	44	5.5	99	12.4

applied 18 listening tactics compared to just six applied by the low-ability group. There were many other tactics used by less than the majority of listeners in both groups. However, in no case did a majority of the low-ability group use a tactic more frequently than the high-ability listeners.

Figure 1 shows the cognitive tactics used by each group. Ten tactics were applied by a majority of high-ability listeners compared with just four tactics applied by the low-ability listeners. Of the 10 tactics, three were for inferencing, one each for elaboration and prediction, two each for contextualization and fixation, and the last one is for reconstruction.

Figure 2 compares the use of metacognitive tactics. The high-ability listeners used eight. Two were directed attention tactics, three were for monitoring comprehension, another one was for assessing parts of input, and the remaining two were tactics for evaluating comprehension. The weaker listeners used only two of these. Both of these were basic comprehension-monitoring tactics; that is, confirming comprehension and identifying those parts that were problematic. There were few reports about checking interpretation while listening.

A key difference between the two groups was the quality of the metacognitive tactics used. One possible reason for the poor metacognitive tactic use among low-ability listeners is their preoccupation with difficult words or ideas. We can infer this from the fact that tactics for coping with such difficulties had been reported almost exclusively by the high-ability listeners. One such tactic is to continue listening in spite of problems. All eight high-ability listeners used it compared with only three from the low-ability group. The high-ability listeners often redirected their attention to the task even though unfamiliar words or ideas momentarily distracted them. Like subjects in Vogely's (1995)

study, they continued to listen in the hope that they would get some information that could enhance their understanding. This perhaps has to do with their ability to assess the value of words that they did not understand and make a quick decision to ignore such words. In contrast, the weaker listeners appeared to be more concerned with trying to guess the meaning, and missed the other parts of the text as a result. As Steve Tauroza (1997, personal communication) has noted, this is a case of the high-ability listeners probably seeing the glass as half-full when the low-ability listeners regard it as half-empty. In other words, the better listeners were prepared to work with what they had understood, whereas the low-ability ones worried about what they had missed. The ability to cope with problems during listening is another feature that further distinguishes the groups.

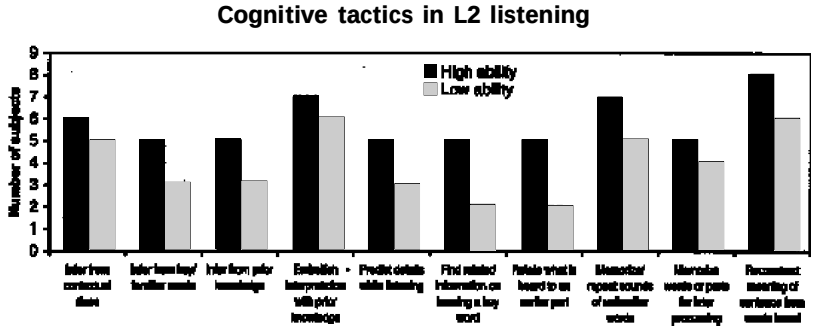

Figure 1 Cognitive tactics used by a majority of high-ability listeners compared with low-ability listeners' use of the same tactics

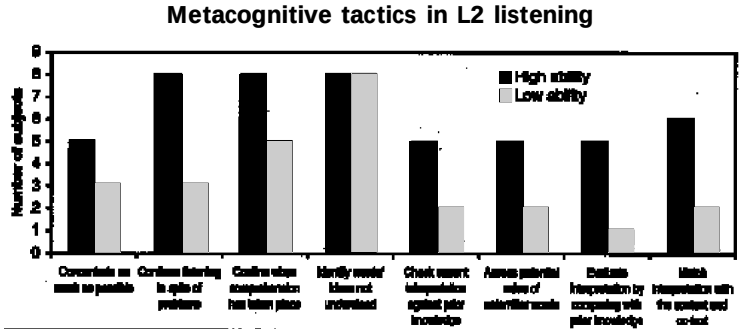

Figure 2 Metacognitive tactics used by a majority of high-ability listeners compared with low-ability listeners' use of the same tactics

V Profiles of high- and low-ability listeners

A profile for each group of listeners has emerged from this analysis. High-ability listeners were able to use a wide range of strategies and tactics. They also engaged extensively in top-down processes. This is seen in the presence of strategies like inferencing, elaboration, prediction, contextualization and, to some extent, reconstruction. Nevertheless, they also tried to process input in a bottom-up manner by using fixation tactics. One outstanding characteristic of this group of listeners was their ability to use the whole range of metacognitive strategies – planning, monitoring, evaluating – to manage their listening. In particular, they were able to cope well with difficulty during listening.

In addition to using many strategies as a group, individual learners also used a number of tactics for each strategy identified. They were also able to vary tactics within the same strategic approach, depending on the situation. Although the weaker listeners also adopted some of the same strategic approaches, the high-ability listeners were notably different from them in the frequency and the quality of tactics used to put these strategies into action.

The overall picture that has emerged for the low-ability listeners is one of a group of learners who were able to apply a few useful listening strategies quite extensively, but who were greatly hampered by a limited repertoire of tactics. They were also conspicuously lacking in metacognitive tactics in all three areas of planning (including coping), monitoring and evaluating. Although they had a tendency to get fixated at difficult parts, they also made extensive use of two top-down strategies. These were inferencing and elaboration, which were used to fill in the gaps in their understanding and to embellish interpretation.

VI Conclusion

Although we now have an idea of some cognitive differences that distinguished the good listeners from the weaker ones, it is difficult to determine if it was the wide and flexible use of strategies and specific tactics that made those learners in the high-ability group more competent second language listeners. Or whether they were able to use these strategies because they had higher language

proficiency and were therefore able to apply strategies to improve their listening. In other words, since they had less of a problem with listening they could free their attention to try out different strategies. As this study did not trace individual learners' development, we are unable to answer some of these questions. It is worth noting, however, that five of the learners in this high-ability group had low pretest listening scores, but made dramatic improvements in the post-test and in their overall listening ability six months later.

The subjects in this study did not receive any explicit strategy training. Nevertheless they were able to apply a number of listening strategies. The high-ability group in particular had an impressive repertoire of strategies and tactics. We can deduce that they had been able to successfully use strategies and tactics successfully from their L1. Mendelsohn (1995) has noted that many learners are unable to transfer L1 strategies into L2 listening. The low-ability group in my study could be an example of this. To what extent had these learners been restricted by factors such as the vocabulary or certain features of spoken text? Could it be that they had unrealistic expectations of what good listening comprehension should be – the 'half-full and half-empty glass' phenomenon?

Although the findings in this study cannot be applied directly to learners in other situations, they have nonetheless shown that learners do use strategies in their listening. There is certainly still a need for some form of strategy training in listening comprehension (Chamot, 1995; Mendelsohn, 1995; Rubin, 1995); but, as Mendelsohn (1995: 135) has pointed out, we must not make the assumption that learners do not use strategies. The problem is often one of transfer. Our role should be to 'unlock those first language strategies' so that learners can use them in the second language. Chamot (1995) also stressed the need for teachers to help language learners become aware of the strategies they use in their L1. Some cognitive strategies seemed to have made the transition without explicit instruction, as the subjects in my study have shown. Three notable examples are inferencing, elaboration and predicting, which learners adopted frequently. In view of this, more time should be spent on metacognitive strategies. The weaker listeners in particular were less able to manage their listening processes, especially when they encountered problems. Such

learners will benefit from learning to pay attention to selected aspects of a text and using tactics to cope with difficult words or ideas, so that they can get on with the listening task without missing out on subsequent parts of the message. Even the better listeners can train in the area of comprehension monitoring. As Pressley *et al.* (1992) have pointed out, poor comprehension monitoring is one reason why strategies are not used effectively. Strategy training for all should also focus on both one-way and two-way listening because there are considerable differences between the two (Lynch, 1997); two-way listening will require the use of interactive or social strategies, which I have not discussed in this article.

Another important consideration for strategy training is that learners should be trained not only to adopt broad strategic approaches, but also to use specific tactics. The results in my study show that, although the weaker listeners used inferencing and elaboration, their range of tactics for operationalizing each strategic approach was rather limited. Apart from direct training, we can help learners develop better strategic approaches by raising their awareness about listening strategies and tactics that they are already using in listening to English and how their existing repertoire can be further improved. We can do this by creating opportunities for learners to examine their listening processes before and after their listening tasks in class (Chamot, 1995) or by asking them to keep a listening diary (Goh, 1997). They should then share their observations with other learners in the class (Matsumoto, 1996 discusses the benefits of such sharing).

The curriculum for listening should therefore include both direct strategy training and awareness raising (Chamot, 1995), incorporating special activities for learner training (Ellis and Sinclair, 1989; Wenden, 1991). Buck (1995) has given some excellent advice on precommunicative and communicative practice. While learner training seems to be our latest hope for helping learners become better L2 listeners, we need to be realistic about the results. As Buck has rightly pointed out, we cannot teach students how to perform cognitive processes since we do not know enough about cognition to explain how it works (1995: 122). He suggests instead that teachers should 'give them [learners] some guidelines, provide an opportunity for meaningful practice and trust they will learn these things for themselves'.

I believe the best way to guide learners is to help them develop greater metacognitive knowledge about learning to listen. There is strong evidence to show that what learners know about their learning can directly influence the process and even the outcome of it (Palmer and Goetz, 1988). In particular, metacognitively aware learners are more successful at transferring strategies that are appropriate to new learning tasks (Paris and Winograd, 1990). There is a need, therefore, to raise second language learners' awareness about listening strategies and tactics that they can apply as well as about themselves as second language listeners and how they can approach the complex task of learning to listen in another language. This means helping learners to have a better understanding of how their listening comprehension is affected by their listening strategies and tactics, personality, cognitive style, motivation, confidence and other personal factors. It also means helping listeners make informed choices about how they can develop their listening competence on their own without relying completely on the teacher's help. Learners who are aware of the processes that can contribute to success in listening comprehension will be in a better position to develop flexibility in the use of comprehension strategies and tactics as well as find suitable ways for systematic practice outside the classroom.

Acknowledgements

I would like to thank the following people for their help: Keith Johnson and Dick Allwright for their advice on the research, Steve Tauroza for his interest in the research and sharing his insights on learner listening, and the two anonymous *LTR* reviewers and Paul Doyle for their helpful comments on the article.

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