CHAPTER 2

REVIEW OF LITERATURE AND RELATED RESEARCH

The aims of this study were to investigate the effects of the pre-listening question and the post-listening question techniques on English listening achievement and to determine students' attitudes towards the two approaches among the third year English major students of the academic year 2006 at Prince of Songkla University, Pattani Campus. This chapter presents relevant background information necessary for this study. The first part deals with theoretical background on listening comprehension that is further divided into definitions of listening comprehension, listening comprehension process, models of listening process, language functions, and the nature of listening. Following is the literature about the pre-listening question and the post-listening question techniques. Then, a framework for describing listening ability is reviewed. Literature related to listening comprehension questions is reviewed in the following section. Finally, related research studies carried out in the fields of listening comprehension are presented.

2.1 Related Literature on Listening Comprehension

2.1.1 Definitions of Listening Comprehension

With regard to the term 'listening comprehension' in language learning, scholars have proposed a number of different definitions. Chastain (1971), for example, defined listening comprehension as the ability to understand the speech of native speakers at normal speed in listening situations. Similarly, Saricoban (1999) noted that listening comprehension is the ability to identify and understand what others are saying. This involves understanding a speaker's accent or pronunciation, his or her grammar and vocabulary, and grasping the meaning conveyed. Listening

comprehension can also be defined broadly as human processing which mediates between sound and the construction of meaning (Morley, 1991). That is, after people receive sounds from the environment, they try to get the meaning out of the sounds they hear. In a similar token, listening comprehension is described as a complex process of what people use to understand speech. Dirven and Oakeshott-Taylor (1984) suggested that those complex activities cannot be understood by simply looking at the linguistic cues or knowledge of the language, but non-linguistic cues or knowledge of the world also have to be considered in the comprehension process. A similar view is proposed by Byrnes (1984), who defined listening as a complex skill in which people have to employ all types of knowledge to interpret the meaning. She explained that listening is more than the perception of sounds. Rather, it includes comprehension of words, phrases, clauses, sentences and connected discourse.

Although these definitions vary to some extent, basically listening is considered as an activity in which listeners employ a variety of processes in trying to comprehend information from oral texts. In this way, listeners construct meaning from the passage and relate what they hear to their existing knowledge. Additionally, it is meaningful to consider listening comprehension as a three stage process.

2.1.2 Listening Comprehension Process

In order to understand how listeners understand spoken language, it is essential to understand the listening comprehension process. There are three distinct stages in the aural reception of an utterance (Underwood, 1989). At the first stage, the sounds go into a sensory store to be organized into meaningful units based on the listener's existing knowledge of the language. While the sounds remain in this stage for a limited period of time, the listener has trouble understanding what is heard especially for foreign language learners, leading to the listener's missing the incoming new information while he/she is busy with a previous chunk of data. After that, in the second stage, the information is processed by the short-term memory. At this point, words are checked and compared with the information already held in the long-term memory from which the meaning is extracted. However, if the speed of processing is too fast, the actual words might be forgotten, especially when the second chunk of

information arrives in the short-term memory before the previous chunk has already been processed. A new language learner may not be able to process fast speech quickly and might fail to extract the meaning from it. At the third stage, after the listener constructs meaning from the utterance, he/she might transfer the information to the long-term memory for later use. Generally, a listener stores the meaning in a reduced form; the evidence shows that when recalling something from the long term memory, people usually remember the meaning of what is said rather than the exact words. For example, Goh (1997) found that about two-thirds of the students could not remember certain words and phrases they had just heard. Although they could understand what was said when they heard it, they would forget it as soon as they began listening to another part of the message. This is because of the limited capacity of the short-term memory. Clark (1977) elaborated the view of listening comprehension in the same way. That is, after the listener takes in raw speech and retains a phonological representation of it in "working memory", he or she immediately attempts to organize the phonological representation into constituents, identifying their content and function. As they identify each constituent, they use it to construct underlying propositions, building continually into a hierarchical representation of propositions. Once they have identified the propositions for a constituent, they retain them in working memory and at some points purge their memory of the phonological representation. In doing this, they forget the exact words while retaining the meaning.

Morley (1991) viewed listening comprehension in a similar way proposing three steps of information processing in listening comprehension. Since comprehension of a message is essentially the internal production of the message, listening is the skill that makes the heaviest processing demands because learners must store information in short term memory at the same time as they are working to understand the information. Morley suggested that the listening comprehension process can be described as a series of steps of information processing which takes advantage of both top-down and bottom-up operations. When raw speech enters the mind as acoustic data, it first enters the sensory store and is taken into short-term memory in the second step. Due to the capacity limitation of the short-term memory, no more than 7 to 12 bits of information can be held in the short-term memory at any

time during this step, so the listener might fail to understand the passage. The function of the short-term memory is to analysis the aural speech into meaningful propositions and to try to relate what is heard to other propositions in the short-term memory. If there is no proposition in the short-term memory to which the incoming proposition can be related, then a search of the long-term memory must be initiated. After that a suitable proposition is recalled and related to the new information.

This cognitive framework is helpful to understand learners' difficulties as it pinpoints those places in the cognitive process where comprehension can break down. This knowledge can help us detect the source of difficulties experienced by our learners. Knowing why some of the problems occur will naturally place us in a better position to guide our learners in ways of coping with or overcoming some of their listening difficulties. For a new language learner, Dornic (1979) argued that the listening process takes more time at every stage: decoding, rehearsal in short-term memory, organization of information for storage, and the relation of information from the long-term memory. It is because memory capacity is less in the second or foreign language that the input is likely to be available for a shorter time (Lado, 1965). Besides the three stages of how humans process incoming spoken messages, it is essential to understand other aspects of listening comprehension notably the three models of listening process.

2.1.3 Models of Listening Process

In terms of language processing, it is now generally accepted that learners need access to both top-down and bottom-up processing strategies. Bottom-up processing strategies focus learners on the individual components of spoken messages, that is, the phonemes, individual words and grammatical elements which need to be comprehended in order to understand the messages. Top-down processing strategies, on the other hand, focus learners on macro-features of text such as the speaker's purpose, and the topic of the message (Nunan, 1998). It was noted by Richards (1990) that an understanding of the role of bottom-up and top-down processes in listening is central to any theory of listening comprehension. It is, of course, clear that we cannot see and observe the cognitive process of listening. However, understanding the

listening process can help us to rethink the methods of teaching listening. For this purpose, there are three key components for clarifying the listening process: bottom-up, top-down and interactive processes.

2.1.3.1 Bottom-up Processing

Morley (1991) maintained that bottom-up processing of language information is evoked by an external source, that is, by the incoming language data itself. Bottomup comprehension of speech, then, refers to the part of the process in which the understanding of incoming language is worked out from converting sounds into words, into lexical meaning and grammatical relationships and so on to an understanding of the meaning of the message. Thus, the meaning of a message is based on the incoming language data. Moreover, Buck (2001) suggested that in bottom-up processing, the process takes place in a definite order, starting with the lowest level of detail and moving up to the highest level. That is, the input is first decoded into phonemes which are used to identify individual words. Then the syntactic level continues processing on to the next higher stage followed by an analysis of the semantics to arrive at a literal understanding of the basic linguistic meaning. Finally, the listener interprets the literal meaning in terms of the communicative situation to understand what the speaker means. Nunan (1998) remarked that the characteristics of the bottom-up approach focus learners on the individual components of spoken messages that is the phonemes, individual words and grammatical elements which need to be comprehended in order to understand the message. A similar view was proposed by Carrel (1988), who indicated that listeners construct meaning from the smallest units of letters and words to larger ones like phrases, clauses, sentences, and paragraphs. According to the bottom-up model, the meaning of the message is thus based on the incoming language data combined with linguistic knowledge of different types including phonology, lexis, syntax, semantics and discourse structure. This is why some scholars (Carrell, 1988 and Brown, 2001) described this model as text-based and data driven processing. Accordingly, bottom-up processing of language information, or text-based processing refers to the use of incoming data as a source of information about the meaning of a

message. Examples of bottom-up processing in listening viewed as a process of decoding include the following:

- 1. Scanning the input to identify familiar lexical items
- 2. Segmenting the stream of speech into constituents for example, in order to recognize that "abookofmine" consists of four words.
- 3. Using phonological cues to identify the information focus in an utterance.
- 4. Using grammatical cues to organize the input into constituents for example, in order to recognize that in "the book which I lent you" "the book" and "which I lent you" are the major constituents rather than "the book which I" and "lent you" (Richards, 1990).

The listener's lexical and grammatical competence in a language provides the basis for bottom-up processing. A person's lexical competence serves as a mental dictionary to which incoming words are referred for meaning assignment. Grammatical competence, thus, can be seen as a set of strategies that are applied to the analysis of incoming data.

2.1.3.2 Top-down Processing

Chaudron and Richards (1986) noted that top-down processing involves prediction and inference on the basis of facts, propositions and expectations. That is, it is quite possible to understand the meaning of a word before decoding its sounds because we have different types of knowledge, including knowledge of the world. This idea comes from real life situations in which we know what normally happens, and so we have expectations in mind about what we will hear. Top-down processing, then, comes from an internal source evoked from prior knowledge and global expectations. These include expectations about language and expectations about the world. Background knowledge may take several forms: previous knowledge about the topic of discourse, situational or contextual knowledge, and knowledge stored in long-term memory in the form of "schemata" and "scripts" (Richards, 1990). The term 'schema' is defined in Rumelhart (1980) as a data structure for representing generic concepts stored in memory. Carrell and Eisterhold (1983) additionally pointed out that background information in the listener's mind is of two kinds: content schemata

and formal schemata. Content schemata include cultural knowledge, topic familiarity, and previous experiences. Formal schemata, on the other hand, involve people's knowledge of discourse forms: text types, rhetorical conventions, and the structural organization of prose. Both content and formal schemata facilitate the listeners' comprehension of text. Clearly, schemata or scripts are closely related to top-down processing in listening comprehension.

According to Buck (2001), top-down processing utilizes various types of knowledge involved in understanding language and these are not applied in any fixed order. In fact, they can be used in any order or the application of the different types of knowledge used in processing may occur simultaneously. For example, syntactic knowledge might be used to help identify a word, or idea about the topic of conversation. Knowledge of the context will also help interpret the meaning.

In the same vein, Anderson and Lynch (1988) posited that meaning does not reside exclusively within the words. It also exists in the head of the listener. Successful listeners are those who can make use of both the knowledge inside and outside their heads to interpret what they hear. Therefore, the use of knowledge inside the head is the use of knowledge which is not directly encoded in words. This top-down view of listening is also known as knowledge-based processing.

Examples of top-down processing in listening which make use of background knowledge in understanding the meaning of a message include:

- 1. Assigning an interaction to part of a particular event, such as storytelling, telling a joke, praying, and complaining.
- 2. Assigning places, persons, or things to categories.
- 3. Inferring cause and effect relationships.
- 4. Anticipating outcomes.
- 5. Inferring the topic of a discourse.
- 6. Inferring the sequence between events.
- 7. Inferring missing details (Richards, 1990).

2.1.3.3 Interactive Processing

An extension of the ideas of bottom-up and top-down processing is the view that listening comprehension actually involves interactive processing. That is, listening comprehension is a combination of bottom-up and top-down processing. It was suggested by Richards (1990) that in accounting for the nature of processing spoken language, bottom-up and top-down modes work together in a cooperative process. O'Malley, et al. (1989) also found that effective second language listeners used both top-down and bottom-up strategies to construct meaning while ineffective listeners try to decode the meanings of individual words. The point is simply that listening comprehension is the result of an interaction between a numbers of pieces of knowledge. To comprehend spoken language, listeners have to use many types of knowledge. The knowledge of individual linguistic units such as phonemes, words, or grammatical structures, and the role of the listener's expectation, the situation, background knowledge, and the topic are all important for listeners to be able to understand speech. In other words, listeners use whatever information they have to interpret what the speaker is saying.

Studies have been carried out to specify the types of processing skilled listeners mostly rely on. It was found that skilled listeners are better able to use top-down, or knowledge based processes whereas less-skilled listeners tend to rely on bottom-up, or text-based processes. Hildyard and Olson (1982, cited in Rubin, 1994), for example, studying the comprehension and memory of oral versus written discourse, found that skilled listeners use a knowledge-based mode of text processing whereas less-skilled listeners attend mostly to local details. Similarly, Shohamy and Inbar (1991), in a study of the effect of text and question type on listening comprehension, found that less-skilled listeners performed much better on 'local questions' which required the listener to identify details and facts, than on 'global questions' which required the listener to synthesize information, draw conclusions and make inferences. They, therefore, concluded that while high level listeners seemed to process the text in a knowledge-based manner, the low level listeners seemed to process the text in a data-driven manner. Some studies, however, have indicated that skilled listeners are those who are able to monitor their developing interpretation of

the incoming text by constantly checking it against the incoming linguistic cues and to modify their interpretation accordingly. For example, Buck (1990) stated that listeners must check and monitor their developing interpretation in the light of the linguistic input and their background knowledge to ensure that the interpretation is a reasonable one. Buck maintained that the ability to adjust the interpretation in response to new information is obviously an important listening skill. Moreover, Richards (1990) pointed out that good listeners use a number of processes simultaneously to reach an understanding of incoming speech.

In brief, in listening comprehension, bottom-up and top-down processing are co-related in a complex relationship and both are used to interpret meaning. To arrive at an understanding of the message, listeners must understand the phonetic input, vocabulary, and syntax (bottom-up processing), and at the same time, use the context of situations, general knowledge, and past experiences (top-down processing). That is, to construct the meaning, listeners are not passively listening to speakers but are actively reconstructing the speakers' intended meaning and getting meaningful information by decoding the sounds, words, and phrases.

2.1.4 Language Functions: Interactional Language Function and Transactional Language Function

Language function is another important aspect worthy of attention. The functions of a language could be seen as the purposes of the language when people communicate. These functions can be divided into two major groups, i.e. language for interactional and transactional purposes (Brown and Yule, 1983). The purpose of the interactional function of language is to express social relationships and personal attitudes. The interactional function is more listener-oriented than message-oriented or focuses more on the person than on information. The purpose of this function has the major objective of maintaining social relationships.

The purpose of the transactional function of language, on the other hand, is to convey factual or propositional information. Examples of transactional language include instructing, giving directions, explaining, describing, ordering, inquiring,

requesting, checking the correctness of details, etc. Since transactional language is message-oriented with a focus on content, language use must be accurate.

From those two perspectives of language processes and language functions, Richards (1990) proposed a model of material design for second language listening comprehension that combines both of them together. Using the two language processes and the two language functions, he constructed a four-part grid which allows for a listening activity to be designed according to the demands of the listening function and the process, as shown below.

The model of communication between language functions and language processes

INTERACTIONAL

воттом up 1 3 тор down 2 4

TRANSACTIONAL

Richards gave an example for each of the four cells as follows:

Bottom-up mode

- 1. Listening closely to a joke (interactive) in order to know 'when to laugh'.
- 2. Listening closely to instructions (transactive) during a first driving lesson.

Top-down mode

- 3. Listening casually to cocktail party talk (interactive)
- 4. Experienced air traveler listening casually to verbal air safety instructions (transactive) which have been heard many times before.

Richards also gave examples of interactional uses, such as greetings, small talk, jokes, and compliments. Transactional uses also cover instructions, descriptions,

lectures or news broadcasts. He noted that both interactional and transactional purposes are involved in various situations. In particular, he suggested that effective classroom participation requires both interactional language uses in order for the students to interact with the teacher and other students while accomplishing class tasks, and transactional language use in order to assimilate new information, construct new concepts, and acquire new skills.

2.1.5 The Nature of Listening

A language learner often faces problems in listening when he/she attempts to listen to a new language. The greatest of which with listening comprehension is the special characteristic of the spoken language which is represented by sound. The major difficulties in listening comprehension of English native speaker natural speech include spoken English features, English culture, and the speed of listening delivery.

First, concerning the features of spoken English, it is essential to note that spoken English has specific features. Nord (1980) stated that English oral speech, unlike the written mode, contains ungrammatical, reduced or incomplete forms. It also has hesitations, false starts, repetitions, fillers (e.g. uh, oh, um, hmm, ah, well, kind of, yeh, I mean, I think, I guess) and pauses. These characteristics make up 30-50% of informal conversation. Moreover, spoken English is characterized by pace, volume, pitch and intonation. Even rhythm and stress contain distinctive features that could make comprehension difficult for non-native speakers. Listeners need to be able to interpret words in both stressed and unstressed forms or they may not understand the message (Richards, 1987). These common features of English spoken language can cause difficulty for listeners in their attempt to understand the meaning of the heard strings. Foreign language learners such as Thai students whose first language is based on a different phonological system, rhythm and tone in particular, may experience an even higher degree of difficulty. They often have difficulties in listening when people use English in communication, either in not understanding or misunderstanding what is said to them (Sakda, 2000). To repeat, since the phonological rules of spoken English, which change sounds in certain environments or

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cause reductions of sounds, are unfamiliar to Thai students, these phenomena can

prevent them from understanding speaker's utterances.

Additionally, spoken English usually contains a wide range of idioms and

colloquialisms. The meaning of an idiom seems to be a problem for language learners.

"I'm gunna go now" for of "I'm going to go now" and "I'm zonked" for of "I'm

exhausted" are two examples of colloquial speech which could cause comprehension

difficulty for the second language learner. Similarly, the English expressions 'barking

up the wrong tree' and 'feeling under the weather' for example, cannot be translated

literally. These are all common features of spoken English that make it difficult for

the listener to understand the meaning. Brown (2001) argues that language learners

need to be familiar with and attend to some features of spoken English because, if they

do not do so, their listening processes will be negatively influenced and their

comprehension much hindered. In short, if learners have not been exposed to these

features of spoken English they will not understand what speakers intend in their

utterances.

The second area of difficulty involves those cross-cultural encounters which

potentially lead to misunderstandings between people and can be traced to problems in

listening. Anderson (1985) posited that lack of sociocultural, factual, and contextual

knowledge of the target language tends to hinder comprehension because language is

used to depict the culture of the speakers. Thus, foreign language learners who are not

familiar with English culture have an obstacle to understanding the message. There

have been times when listeners experience problems understanding someone from a

different culture. Consider the following exchange between a native speaker of

English and a Colombian.

American: Who is the best player in Columbia?

Colombian: Columbia.

American: Does uh... who is the Colombian player?

Colombian: Me?

American: No, in Columbia, who is the player?

Colombian: In Colombia plays. Yah.

In the example above, a native speaker of English and a non-native speaker experience a difficulty in understanding each other. We often attribute the problem to the non-native speaker, but actually the problem is a mutual one that must be resolved through adjustments by both parties. Cross-cultural conversation is often difficult for the participants. This difficulty is caused not only by unfamiliarity with the other speaker's language, but also by cultural differences.

The last area concerning difficulties in listening is the speed of text delivery. All second language listeners have probably had an experience of listening to something and not quite understanding it because it sounded too fast to them. They feel that speakers speak very quickly and that they could have understood it if only the speed had been a little slower. Listener perceptions that the speech they hear is too fast are often due to the lack of processing automaticity, and as listeners acquire more skill, and as they learn to process the language more automatically, they would feel that the speech seems to become slower (Buck, 2001).

For that matter, Stanley (1978), conducting a research study on the effects of speech rate on second language comprehension, noted that when speech was faster, language learners constantly failed to perceive individual phonemes and words with which they were already familiar. Also, Griffiths (1992) looked at the effects of three different speech rates (127, 188, 259 words per minute) on the comprehension of speakers of a second language and concluded that comprehension was significantly better at the slowest speech rate and worse at the higher rates. In short, speech rate is an important variable in listening comprehension. Comprehension declines as the speaker increases his/her speed.

Based on the information stated above, it is necessary to make a distinction between two types of cognitive process (Schneider and Shiffrin, 1977). The first one is a controlled process, which involves a sequence of cognitive activities under active control and to which we must pay attention. The second is an automatic process, which is a sequence of cognitive activities that occur automatically, without the necessity of active control and usually without conscious attention. The difference between these two processes is crucial in second language use. To illustrate, when second language learners learn some new elements of a language, they first have to pay conscious attention and think about them, which takes time. Then, after the new

elements become more familiar, they will process them faster until eventually the processing of those elements becomes completely automatic. For language learners with less automatic processing, comprehension will suffer. As the speech rate becomes faster, they will not have sufficient time to process everything, so they will start paying more attention to lexical and grammatical processing and less attention to the interpretation of the meaning (Lynch, 1998). When the speech rate turns faster, the listener would not have sufficient time to process even the lexical and grammatical information, and they will begin to miss parts of the text. At a certain speed, their processing will tend to break down completely, and they will fail to understand all or most of the messages. In particular, Richards (1987) stated that language learners always think that the normal speed which entails approximately 200-220 words per minutes is quite fast and they are unable to grasp the words and the main points in the listening passage. They often feel that the utterances disappear before they can comprehend the message.

In conclusion, these three areas are all big obstacles potentially affecting students' listening ability. It was noted that not only the characteristics of English spoken language and the differences of culture hinder listening comprehension but also the speed of delivery could be an important factor causing difficulties to listening comprehension which leads to learners' insufficient listening ability.

2.2 The Pre-Listening Question and the Post-Listening Question Techniques

There has been much debate about the effects of allowing students to preview the questions before they begin listening to the text. Some researcher (Willis, 1981; Buck, 1990; Mendelsohn, 1995; Thompson, 1995; and Lingzhu, 2003) suggested that question preview supplies relevant information that may orient the listeners' attention in the right direction, whereas others (Ur, 1984; Underwood, 1989; Weir, 1993; and Bradney, 2004) argued that question preview might alter the nature of listening processing because the pre-reading may distract listeners from attending to the actual input. Therefore, there are two opposing views on the pre-listening question and the post-listening question techniques about which technique is the best approach for students.

2.2.1 The Pre-Listening Question Technique

From the point of view of many scholars, the pre-listening question technique is seen as a good approach to be used in listening classes. First of all, Lingzhu (2003) suggested giving students questions before listening to the text. This is because this technique more closely relates to what happens in the real world because we most often listen to a speaker to find answers to questions in our minds, relating to a certain topic, or to confirm what is already thought to be true. She further suggested that if teachers use a certain textbook, in which questions always follow a passage, teachers may ask students to read the questions first. By reading the questions, students may build up their own expectations about the incoming information, by trying to find answers to these questions. This technique induces a selective attention strategy. Students' prior knowledge on the topic can also be activated.

Willis (1981) further noted that the pre-listening question technique is helpful to students and can help them to achieve a high level of success and thus become confident that they can listen effectively. This technique helps focus the students' minds on the topic by narrowing down the things that they expect to hear and activating relevant background knowledge and already known language. For students without sufficient prior knowledge of the topic, this technique can provide an opportunity to gain some knowledge which will help them to follow the listening text.

It is thus very helpful indeed for the students to see the questions before they begin listening to the text. Not only do they then know what they have to seek from the text, but they also benefit from the reading itself. In addition, questions give an indication of the kind of thing that is likely to be heard.

Furthermore, Buck (1990) suggested that previewing questions helped students understand the listening text better and this technique gave useful clues about the content of the story. He believed that students tried to listen for answers to the questions and without reading the questions before listening to the text, they would have understood less. In other words, when questions are given before the text, the listeners know more precisely what to listen for. He further suggested that giving listeners the questions before they listen to the text creates a 'purpose' which should

help them choose appropriate listening strategies. This technique can provide a context for interpretation and can activate students' background knowledge.

Mendelsohn (1995) similarly pointed out that the important role of this technique is to activate the students' existing knowledge of the topic and to use questions given before listening as a basis for prediction and inference. Providing listeners with pre-listening questions can orient them to what they are listening to and direct their attention to the questions rather than having them listen aimlessly. Thus one of the best ways of ensuring that listeners select the most appropriate strategies is giving comprehension questions before listening as it determines students' listening purpose. That is, the questions will determine the listening strategies they choose.

In the similar vein, Thompson (1995) and Willis (1981) said that listening in the real world normally occurs in context which helps listeners eliminate ambiguous interpretations of the message. The pre-listening question technique makes listening tasks similar to real life where listeners usually know some information before listening to texts. Accordingly, the pre-listening question technique has many advantages especially in helping students recognize the crucial parts of the message and helping them focus on specific detailed information.

2.2.2 The Post-Listening Question Technique

In listening classes, some scholars (Ur, 1984; Underwood, 1989; Weir, 1993, and Bradney, 2004) supported teachers' use of the post-listening question technique. They noted that questions normally follow the listening text in examinations or in tests. If the questions precede listening, there is a danger that some of the main ideas or important details might be missed while students try to concentrate on the particular information.

Weir (1993) suggested that students should listen to the listening text and take notes while they are listening, after that the students should be given the test questions and answer them. Weir opined that when students are given the questions before listening there is a danger that they will process input differently. For example, they will listen for specific cues indicating that the answer to the next question is coming up. This would seem to be different from processing a text to make sense of it when

the questions are to be given after listening. Weir further suggested that if we want to test students' ability to extract the main ideas and important details from spoken input, this would appear to be better served by students first making notes while listening to the text and then answering questions after they have finished listening. Therefore, to take notes while listening and answer questions after listening to the text represent a reasonable summation of the information (main points and important details) that could have been extracted from the text.

Furthermore, Bradney (2004) supported Weir's comments that asking for detailed information upon the first listening can be disadvantageous for overall comprehension since students will concentrate on specific pieces of information rather than identifying the intent or meaning of what is being said. According to this view, questions then should come after finishing listening.

Ur (1984) and Underwood (1989) gave a similar opinion that if the questions are given to students before listening; students are guided to listen out for particular information. Thus, the questions demanding global comprehension of an entire text should be asked after listening to the text. If the questions are given after the text, students will have to listen more carefully to the whole text because they do not know what the questions are until the end. This suggests that the post-listening question technique encourages listeners to understand the global meaning of the listening text. Therefore, it is reasonable to conclude that by receiving questions after listening, listeners will understand the overall meaning of the text and demonstrate their listening ability though responding to them.

2.3 A Framework for Describing Listening Ability

The framework constructed by Bachman and Palmer (1996) is currently widely accepted in describing learners' language ability among language testers. This framework is intended to aid test development by describing the components of listening comprehension and to help language testers think about the various aspects of listening skills. The listening ability of learners can be seen from their language competence which is the knowledge about the language that the listener brings to the listening situation. Language competence to be elaborated below consists of

grammatical competence, discourse competence, pragmatic competence and sociolinguistic competence.

First, grammatical competence includes those competencies involved in language usage, as described by Widdowson (1978). These consist of a number of relatively independent competencies such as the knowledge of vocabulary, morphology, syntax, and phonology. These govern the choice of words to express specific significations, their forms, and their arrangement in utterances to express propositions. This kind of competence leads listeners to understand the short utterances on a literal semantic level. For example, a listener, shown a picture of a boy and a taller girl, is asked to describe it. In so doing, the listener demonstrates lexical competence by choosing words with appropriate significations (boy, girl, tall) to refer to the contents of the picture. The listener demonstrates knowledge of morphology by affixing the inflectional morpheme (er) to 'tall'. The listener demonstrates knowledge of syntactic rules by putting the words in the proper order, to compose the sentence 'the girl is taller than the boy'. When produced using the phonological rules of English, the resulting utterance is a linguistically accurate representation of the information in the picture.

Discourse competence which enables listeners to understand longer utterances or interactive discourse between two or more speakers is the second aspect of language competence. This competence includes the knowledge of discourse features, such as cohesion, rhetorical schemata and grammar, together with the knowledge of unplanned discourse structure. Generally, spoken language consists of two or more utterances or sentences that are structured according to rules of rhetorical organization and cohesion which comprises ways of explicitly marking semantic relationships such as reference, sub-situation, ellipsis, conjunction, and lexical cohesion (Halliday and Hasan, 1976). Rhetorical organization, the other component of an utterance, pertains to the overall conceptual structure of a text, and is related to the effect of the text on the language user (Van Dijk, 1977). Conventions of rhetorical organization include common methods of development such as narration, description, comparison, classification, and process analysis (McCrimman, 1984).

The third area of language competence is pragmatic competence which enables listeners to understand the functions of an utterance and interpret the intended meaning

in terms of those functions. Pragmatic competence concerns the relationships between signs and their referents. The competence discussed thus far pertains to the organization of the linguistic signals that are used in communication, and how these signals are used to refer to persons, objects, ideas, and feelings. Pragmatics is thus concerned with the relationships between utterances and the acts or functions that speakers intend to perform through these utterances, which can be called the illocutionary force of utterances, and the characteristics of the context of language use that determine the appropriateness of utterances. Van Dijk (1977) distinguishes two aspects of pragmatics: 1) the examination of the 'pragmatic conditions' that determine whether or not a given utterance is acceptable to other users of the language as an act, or the performance of an intended function; and 2) the characterization of the conditions that determine which utterances are successful in which situations. It suffices to say that this competence helps listeners in understanding whether utterances are intended to convey ideas, manipulate information or learn something.

The last part of one's language competence is known as sociolinguistic competence which enables listeners to understand the language of particular sociocultural settings under the sensitivity or control of the conventions of language use and interpret the utterances based on the context of the specific language use context (Bachman and Palmer, 1996). In every language, there are variations in language use that may be associated with language users in different geographic regions, or those who belong to different social groups. These regional and social varieties of language use, or dialects, can be characterized by different conventions; and the appropriateness of their use varies, depending on the features of the language use context. This includes the knowledge of appropriate linguistic forms and conventions, characteristics of particular sociolinguistic groups, and the implication of their use of slang, idiomatic expressions, dialects, cultural references, figure of speech, levels of formality and registers. In other words, this competence enables listeners to perform language functions in ways that are appropriate to that social context in which they are used.

To summarize, language competence comprises four types of competence, all of which are vital for all in the enterprise of getting sound through understanding and effectively communicating with other people. It can be concluded that communicative

listening ability includes grammatical competence, discourse competence, pragmatic competence, and sociolinguistic competence.

2.4 Listening Comprehension Questions

Like other skills, listening skill can be measured through the use of different types of tools. One of which is the use of comprehension questions. In the listening class, listening comprehension questions are designed to measure how well students understand the content. Asking learners questions is a common procedure in which comprehension questions can be used with a variety of text types. Moreover, comprehension questions can be used to test a wide range of knowledge, skills and abilities. Various types of listening questions are designed to tap different levels of listening comprehension. Weir (1993) classified listening comprehension into 3 levels according to degrees of listening skills.

a. Direct meaning comprehension is ability in:

- Listening for gist
- Listening for the main idea or important information
- Listening for distinguishing the main idea from supporting details
- Listening for specifics, including recall of important details
- Listening for determining a speaker's attitude or intention

b. Inferred meaning comprehension is ability in:

- Listening for making inferences and deductions
- Listening for relating utterances to their social and situational contexts
- Listening for recognizing the communicative function of utterances
- Listening for deducing the meaning of unfamiliar lexical items from context.

c. Contributory meaning comprehension is ability in:

- Listening for understanding phonological features
- Listening for understanding grammatical notions such as comparison, cause, result, degree
- Listening for understanding discourse markers

- Listening for understanding the main syntactic structure of clauses or idea units
- Listening for understanding cohesion, especially reference
- Listening for understanding lexical cohesion, especially lexical set membership and collocations
- Listening for understanding lexis

These three different levels of listening comprehension which require different levels of listening skills encourage students to listen for different purposes. Additionally, Philips (2006), Shohamy and Inbar (1991), Davey (1988), and Nuttal (1996) proposed different types of listening questions for comprehension assessment at different levels. Philips suggested 5 types of listening comprehension questions to tap the three levels of listening comprehension as follows:

1. Basic Comprehension

Basic comprehension questions are those intended to elicit the entire answer which is in the passage. These questions may ask about the overall gist (the main idea or overall topic), or they may ask about specific details in the passage. This comprehension level consists of two question types: a and b below.

a. Gist questions

Gist questions ask about the overall ideas of a passage as a whole. This kind of question may ask what the subject, topic, main idea of a passage, or overall purpose of the passage is. It is important to understand that a learner may locate the gist of a passage easily as it is directly stated in the passage, or have to synthesize information from different parts of the passage to understand the overall gist. The Following are typical questions of this type.

- What is the subject of the passage?
- What is the topic of the passage?
- What is the main idea of the passage?
- What is the purpose of the passage?

b. Detailed questions

Detailed questions ask about specific pieces of information that are stated in a passage. This type of question usually focuses on the details from the passage, exemplified by the 2 questions below.

- What is stated in the passage?
- What is indicated in the passage?

2. Pragmatic Understanding

Questions at the level of pragmatic understanding, which require students to answer the reasons and the feelings of the speakers in that specific situation, consist of one question type, called pragmatic understanding questions.

c. Pragmatic understanding questions

Pragmatic understanding questions ask about a more subtle understanding of spoken English than the main ideas and details that are part of basic comprehension. These questions may test the speaker's purpose in saying something, requiring students to understand not just what the speaker said but why the speaker said it. They may be asked to determine if a speaker said something in order to apologize, explain, clarify a point, change a topic, indicate a change of opinion, or suggest a new action. In addition, they may ask about the speaker's stance, or his attitude toward a particular subject. To answer this type of question, therefore, listeners must listen to what is said in a particular context and draw a conclusion about the speaker's purpose in saying it. A typical wording of this question type is:

- Why does the speaker say this?

Another aspect of this question type is when a student is asked questions about the speakers' stance or attitude. In this question, a student is asked to locate how the speaker seems to feel about a particular topic. Often the speaker does not say directly how he or she feels. However, a combination of the words the speaker says, the context in which the words are said, and the way the words are said can help listeners to understand the speaker's attitude. These questions might ask students to determine whether the speaker feels positive or negative, happy or sad, impressed or unimpressed, or enthusiastic or bored about a particular topic. Below are examples of this question type.

- What is the attitude, opinion, point of view of the speaker?
- Select the sentence that best expresses how the speaker feels.
- What does the speaker mean?

3. Connecting information

Questions about connecting information involve a number of ideas rather than a single detail. The main categories of questions under this heading are two question types: organization questions and relationship questions. The former asks about the organization of the ideas and the latter asks about the relationship between or among ideas in a text.

d. Organization questions

Organization questions ask about how the ideas in the passage are organized. These questions may specifically ask about how the heard information is organized, or they may ask students to fill out a chart that shows the organization. It is noteworthy that this type of question is based on an understanding of the main points and how they are organized rather than on a single point, as demonstrated below.

- How is the information in the passage organized?
- Please fill a chart to show the organization of the passage.

e. Relationship questions

Relationship questions ask about how different ideas or pieces of information in the passage are related. The answers to this question type come from a number of ideas or pieces of information from the passage rather than from a single detail. Examples of this question type are shown below.

- What is most likely.....?
- What is implied.....?
- What can be inferred.....?'

Apart from the 5 types of questions mentioned above, Shohamy and Inbar (1991) suggested 3 types of questions to assess the learners' listening ability according to the variety of answers presented in the passage. The first type of question is the global question which requires students to synthesize information, draw conclusions and focus on cause and effect relationships and inferences. The second type is the local question which requires students to locate details, understand single words with contextual support, paraphrase or recognize facts. The last type of question is the trivial question which requires students to understand precise details which are not related to the main topic. Trivial questions are a subcategory of local questions and

usually relate to numerical details such as numbers, dates, and percentages or names of people and places which are not directly related to the main topic.

Similarly, Davey (1988) proposed 3 types of questions to assess different levels of comprehension based on the different kinds of answer. First, replication questions require students to answer either word-for word or with only minor changes in the lexical form of the text. The answers to these questions could be found within a single sentence of the text which can be underlined or copied. These questions involve finding information about who, what, when, and where. Next, synthesis questions require students to connect the information which spreads across the sentences, or paragraphs of the text. This type of question requires an understanding of the relationships in the text such as cause and effect, sequence, comparison and contrast or the topic and sub-topic. The answers have been found in more than one place. Finally, according to Buck (2001), inference questions which require students to make a deduction, inference, or implication from what they understand of the text message, integrated with their own background knowledge can be utilized at many levels of language processing. In another way, inference questions may be used to ask information which is not clearly stated but indicated by the speaker by using choice of words or tone of voice or asking the meaning of indirect speech acts.

The three types of questions proposed by Davey above are also known as literal comprehension questions, reinterpretation questions and inference questions respectively (Nuttal, 1996). Like replication questions, literal comprehension questions require answers that are explicitly presented in a text or contained in the words of a text. Reinterpretation questions or Davey's synthesis questions require students to reinterpret or obtain information from various parts of a text and put it together. Inference questions so named by both Davey and Nuttal, need answers that are not stated explicitly but require listeners to draw a conclusion from the available information.

To summarize, listening comprehension questions can be considered as consisting of three main types of question: literal comprehension questions, reinterpretation questions and inference questions. Being able to answer these questions correctly means that students understand the message thoroughly. In order to enable students to listen to and comprehend a passage effectively, therefore,

teachers must be aware of the different levels of comprehension and questioning and teach students how to answer the various types of question.

2.5 Related Research on Listening Comprehension

As teachers and scholars grow to understand the unique characteristics of listening skill and the significant role it plays in language learning and communication, they recognize more and more the importance of teaching listening comprehension in the second language classroom. This recognition has resulted in an increase in the number of listening activities in student textbooks and even in methodology texts designed specifically for listening. There is, however, only a small body of research on listening comprehension since it is difficult to gain direct access to the listening process (Yian, 1998). The research in listening comprehension can be categorized according to five major factors that researchers believe to affect listening comprehension: 1) text characteristics; 2) interlocutor characteristics; 3) task characteristics; 4) listener characteristics; and 5) process characteristics. This review of listening comprehension research below considers each of these five factors in turn.

2.5.1. Text characteristics

2.5.1.1 Text characteristics: Acoustic – temporal variables

Griffiths (1992) suggested that three temporal variables – speech rate, pause phenomena, and hesitation are directly relevant to the second language research and English language teaching methodology.

First, speech rate includes a "normal rate" (the rate at which speakers can usually easily comprehend a text) and a "threshold rate" (the rate at which comprehension begins to decrease rapidly). Griffiths noted that it is difficult to compare rate studies. All studies about speech rate used subjects from different language and culture backgrounds and different age groups. Each also used different measurement techniques. In addition, they used different definitions of normal rate and different points where the threshold rate occurs. Griffiths suggested that different

languages have different normal rates and the rates defined in studies using English cannot be applied exactly to studies of other languages. However, most research studies quote a normal speech rate of 165 to 180 words per minute for native speakers of English (Rubin, 1994). Tauroza and Allison (1990) noted that normal rates vary among text types so they compared the normal speed of British speakers for four types of speech. They found that while the means for radio and interview speech events lies within the range of 160 to 190 words per minute, the means for conversation and lecture categories are outside this range. The mean rate for conversation in words per minute was 210, for a lecture was 140. They further noted that 33 percent of their lecture data was slower than 130 words per minute and 23 percent of the conversation data was faster than 220 words per minute.

For a second language listener of English, there is conflicting evidence about how speech rate affects comprehension. Using a text that assumed little background knowledge, Griffiths (1990) found potential evidence that speech faster than 200 words per minute is hard for lower-intermediate listeners to understand. He found that this level of students performed best at 127 words per minute. Working with intermediate level students, Kelch (1985, cited in Rubin, 1994) found significant comprehension effects for slowed speech at 124 words per minute. On the other hand, Blau (1990) found that speech ranging from 145 to 185 words per minute did not significantly affect the comprehension of intermediate and advanced level students. This conflicting evidence about the effect of speech rate on comprehension may relate to a number of variables such as how proficiency is measured, the type of text used, and the amount of background knowledge required.

Second, pause phenomena including pause duration, pause distribution, and pause frequency as well as hesitation phenomena comprising filled pauses ('err', 'um', and 'schwa'), repeats and false starts which are usually grouped together. Several researchers found that pause phenomena are beneficial to comprehension. Jacobs et al (1988, cited in Rubin, 1994), for example, investigated the effect of longer than normal pauses at clause and sentence boundaries on the comprehension of material read aloud at both slow and normal speeds. They found that pauses related significantly to comprehension for more advanced students, but not for less advanced students. They suggested that students benefited from pauses at a certain ability level

and also that input with overly long pauses could bore learners. Another researcher who studied the effect of pauses and hesitation markers on listening comprehension is Blau. Blau (1991) conducted two studies in Puerto Rico and Japan with university students who were learners of English as a second language. In the first study, sixty one students of Basic English were assigned to three groups to hear monologues under three conditions: (1) normal speed, (2) with 3 second pauses inserted on every 23 words, and (3) filled pauses with hesitation markers ("well, I mean, uh"). Students responded in Spanish to questions immediately after each monologue. The results indicated that comprehension of the version with filled pauses was significantly higher than comprehension of the normal version. The version with blank pauses was understood slightly less than the filled pauses version. In the second study, forty eight students were randomly assigned to four groups. The first three groups heard the monologues used in the previous study and the fourth group heard slowed monologues. Comprehension questions were in English. The results indicated that comprehension of the filled pauses version was significantly better than for the normal, slow, and blank pause versions. There was little difference in comprehension found among those three versions. Overall, using the filled pause version with hesitation markers was the most effective aid to listening comprehension. In addition, Dunkel (1988, cited in Rubin, 1994) worked with both low and high listening proficiency groups and used taped versions of a lecture. She found that the use of hesitation phenomena gave students time to take a greater quantity of notes. However, some listeners appear to regard hesitation phenomena as detracting from comprehension. For example, Voss (1979, cited in Rubin, 1994) studied repeats, false starts, filled pauses, and unfilled pauses in spontaneous speech. He found that all types of hesitation phenomena cause perceptual problems for non-native speakers. They get stuck in bottom-up processing of phonetic utterances that do not affect meaning.

2.5.1.2 Text characteristics: Acoustic – other variables of stress and rhythmic

Perception of stress is an important factor in rapid and efficient listening comprehension. Vanderplank (1985, cited in Rubin, 1994) found interesting differences in native speakers' and non-native speakers' ability to perceive stress. She found that native speakers were in general agreement as to sentence stress location, while only a small number of non-native speakers agreed with native speakers' judgments as to stress location. Also, she found that the ability to perceive stress location was not significantly linked to level of English ability. She conducted a study of stress matching as an aid to the development of listening comprehension. This experiment was carried out at the University of Edinburgh to discover ways in which students might be helped to understand spoken language and to become more confident in their interactions in the language. Materials were designed to train students to perceive stress patterns, to internalize stress at both word and sentence levels, and to develop an accurate awareness of the perceptual structure of the message. The stress and rhythm patterns were simplified for perceptual training while maintaining the stress location of the authentic discourse. It is claimed that training in stress perception allows the understanding process to operate more efficiently.

2.5.1.3 Text characteristics: Morphological and syntactic modifications including restatements

There is a great deal of controversy over what kinds of syntactic modifications improve comprehension. Chaudron (1983) considered the role of syntactic modifications in making listening more comprehensible. This experiment was designed to investigate how different types of topic reinstatements affected second language learners' recognition and recall of sentence topics in lectures for three proficiency levels, low, medium and high. The variant reinstatement structures were repetition of the noun topic, rhetorical questions, synonyms, conditional clauses, and simple noun reiteration. The research question was whether syntactic simplicity or elaboration and redundancy would be more effective in promoting retention of the

topic. Findings indicated that the redundant repeated noun was significantly better recognized than the simple noun, and was better recalled than the conditional or synonym. Learners with relatively low English proficiency tended to have poorer recall ability on the syntactically more complex structures. Another study by Chiang and Dunkel (1992) was carried out to investigate the listening comprehension of high intermediate and low intermediate students on lectures that were modified and others that were not. The modified discourse contained information redundancies and elaborations. They found that high intermediate students benefited from speech modification while low intermediate students did not. Both Chaudron and Chiang and Dunkel agreed that redundancy improved comprehension. They found that modification of repetition, paraphrase, and use of synonyms works best with high intermediate students as compared to low intermediate students. Glisan (1985, cited in Rubin, 1994) also found that advanced students understood longer, modified sentences more readily and more successfully than shorter, unmodified sentences.

2.5.1.4 Text characteristics: Text type

Text type has been noted as a factor affecting listening comprehension. It is assumed that since most written texts are more syntactically complex, less redundant, and use fewer pauses than spoken texts, they are more difficult to understand. Conversely, because conversational texts are less complex syntactically, more redundant, and have more pauses, they are easier to understand.

Shohamy and Inbar (1991) investigated the effect of three text types: a news broadcast using a pre-written text, a lecture consisting of a monologue based on written notes, and a consultative dialogue involving constant interaction on listening comprehension. They varied in the degree of oral features. The consultative dialogue was the most orally-oriented version, followed by the lecture, and then the news broadcast which constituted the most literate version of the three text types. Their subjects were twelfth-grade Israeli students of English as a foreign language. For each text type there were two topics. The text types in both topics followed the same order of difficulty: the news broadcast was the most difficult, followed by the lecture and the dialogue. Results indicated that different types of texts ranged along the oral to

literate continuum, resulted in different test scores. The more orally-oriented texts were easier to understand than the literate texts.

Furthermore, many studies have suggested that visual support can enhance listening comprehension. Rubin (1990, cited in Rubin, 1994), for example, found that the listening comprehension of high-beginning Spanish students who watched dramas on video improved significantly over students who received no video support for their listening training. Similarly, Herron et al (1995, cited in Rubin, 1994) reported that for first year university French students, their listening comprehension improved more after one year's exposure to a video-based curriculum than after the same length of exposure to a text and audio-based curriculum. Another variable in the use of visual support is the perceived difficulty of the text. Wolf's study of German ESL learners between ages twelve and eighteen found that the more difficult the text was, the more subjects used the illustrations. Wolf (1987, cited in Rubin, 1994) suggested that with an easy text, subjects ignored the illustrations but with harder texts, subjects needed a more schema-based approach using the illustrations.

2.5.2 Interlocutor characteristics

Markham (1988) considered the effect of sex bias and perceived speaker expertness on ESL student listening recall. A total of 53 intermediate and 45 advanced university level ESL students listened to an expository prose passage. The four treatment conditions were (a) presentation of the passage by a male speaker who was not introduced, (b) presentation by a female speaker who was not introduced, (c) presentation by an expert male speaker preceded by a brief introduction concerning the speaker's educational training and publications, and (d) presentation by the expert female speaker preceded by a brief introduction concerning the speaker's educational training and publications. The results indicated that 1) both groups recalled more from the non-expert male speaker than from the non-expert female speaker 2) the advanced group recalled more from the male expert than from the female expert 3) both groups performed at a noticeably higher level when the presentation was given by a female expert than by a female non-expert. However, this result may be truer for some cultures than for others because over 51% of their subjects were North Asian. As the

researcher noted, perhaps female listeners are gradually conditioned to be more attentive to male speakers as a result of gender-related status divisions in the speech community.

2.5.3. Task characteristics

There is a little research comparing task types for L2. For example, Brown et al (1985, cited in Rubin, 1994) considered ways to assess the relative difficult of a task for native English listeners. They note that the tasks should not rely heavily on memory or writing abilities. In addition, Chang and Read (2006) investigated the effects of four types of listening support task: previewing the test questions, repetition of the input, providing background knowledge about the topic, and vocabulary instruction. The research involved a classroom-based experiment with 160 students enrolled in a required English listening course at a college in Taiwan. The results showed that the most effective type of support overall was providing information about the topic, followed by repetition of the input and question preview. Vocabulary instruction was the least useful form of support.

Moreover, a few studies have been conducted about the use of questions in listening skill. Shohamy and Inbar (1991) considered how the type of question influenced success in second language listening tasks. They found that subjects performed better on questions referring to local cues in the text than on those referring to global cues. They concluded that it is apparently more difficult to generalize, infer, or synthesize information than it is to look for data-specific information. Finally, they reported that most students who responded to global questions were also able to respond to local questions but not vice versa.

Furthermore, the following two studies which both looked at the effect of question positions are directly related to the present study. First, Buck (1990) studied the effects of previewed questions on listening comprehension. Six female Japanese university students living in Britain participated as research subjects. The research instrument used in this study was a short narrative text consisting of 13 sections. After each section, the tape was stopped and students answered a number of test questions. They were then interviewed about their replies and asked to restate the content in their

first language. Three students were randomly assigned to do the test without question preview. That is, they listened to each section of the text before seeing the test questions. The other three students did the test with question preview. That is, they had an opportunity to look at the test questions before hearing the text for each section of the story. Buck found that knowing the questions before listening did not enhance the students' listening comprehension but in the students' opinion, they believed that they actively searched for answers to previewed questions while listening. Also, they thought that previewing questions helped them by supplying information about the story.

Another study by Sherman (1997) examining the effect of question position on listening comprehension was carried out on 78 intermediate-level undergraduate students of Social Sciences at LUISS University in Rome. The 78 subjects were randomly placed into 4 groups; 24 in group 1, 23 in group 2, 14 in group 3, and 17 in group 4. In this study, Sherman focused on 4 different versions of question position: 1) version A (pre-listening questions) in which questions were given to subjects before hearing the text; 2) version B (post-listening questions) in which questions were given to subjects after hearing the text; 3) version C (while-listening questions) in which questions were given to subjects after they listened to it once, then they listened to it again and answered the questions; 4) version D (free) in which subjects heard the text twice, then wrote down what they could remember of the story. In versions B, C, and D, the subjects could take notes if they wished. The texts were four recorded anecdotes. The four versions of the four tests were given to the four groups of students mentioned above. Thus, each group did a different version of the test for each text. Following the test, a questionnaire was employed to probe students' perceptions of the effects of the different versions of the test. The result showed that the subjects taking version A (pre-listening questions) and B (post-listening questions) of the test produced almost exactly the same results while the subjects taking version C got the highest scores compared with other versions. Also, version C came out as the most widely favored approach in the questionnaire, with A second and B third, while version D was least preferred. Therefore, the results of Sherman's study suggested that while-listening questions are the most preferable method to test listening.

2.5.4. Listener characteristics

Listener characteristics appear to have considerable impact on an individual's listening comprehension. Among these characteristics are: language proficiency level, memory, age, gender, and background knowledge.

First, language proficiency level is a major variable in almost all of the studies. A major problem in comparing studies is that there are few standardized tests to determine proficiency level. Most studies use either teacher judgment, course level, or a performance on a nonstandard test. Most researchers suggested that cognitive processing varies depending on the learners' knowledge of the language. It is not clear what role grammar, vocabulary, background knowledge of the culture, or knowledge of discourse processes play at different proficiency levels. However, the use of standardized listening proficiency tests such as those of the American Council of the Teaching of Foreign Languages (ACTFL) and The Interagency Language Roundtable (ILR) is working towards a standard to be used in listening comprehension researches (Rubin, 1994). It is clear that language proficiency is a variable that needs to be considered in every study.

Second, the relationship between memory and listening comprehension is complex. Call (1985) considered whether listening comprehension was related to short-term memory for five types of auditory input: sentences in context, isolated sentences, random words, random digits, and musical tones. She found that listening comprehension was correlated with these five types in the following order: isolated sentences, sentences in context, musical tones, random words, and random digits Also, Dunkel et al (1989) considered the influence of short-term memory on encoding lecture material in English. They studied students taking college freshman English classes. The students were native and non-native speakers who were presumably at an advanced level in English. They found that subjects who had high short-term memory correctly recognized more concept information and detail information than subjects who had low short-term memory. Moreover, they found that native speakers recognized significantly more of the lecture concepts and detail than did non-native speakers of English. In addition, Conrad (1989, cited in Rubin, 1994) compared the memory of non-native speakers at high and medium-skill levels for recorded sentences

at different speaking rates. She found that non-native speakers tended to ignore information in the middle of sentences. Rather, they tried to duplicate the beginnings or ends of sentences.

Third, age is an important variable affecting second language achievement. Seright (1985) considered the relationship between age and L2 achievement of adults in an instructional setting. Working with members of the Canadian Armed Forces undergoing English language training in Quebec, she used 71 learners who ranged in age from 17 – 41 years of age with a mean age of 22.76 years. Seright divided the students into two groups: an older group (aged 25 to 41) and a younger group (aged 17 to 24). Both groups were compared with respect to short-term development in aural comprehension. She found that the mean gain was significantly greater for younger subjects than for older subjects. Her study suggested that in adult L2 learners, the rate of achievement in aural comprehension decreases with increasing age.

Fourth, only a few studies have examined gender in listening skill. Some studies have considered how gender may relate to differences in listening comprehension. For example, Boyle (1987) used Chinese students of English between 18 – 20 years old in his research. Using a battery of tests including a vocabulary recall, a listening passage, a listening conversation, two dictations, vocabulary identifications given orally, as well as other items not related directly to listening, he found that males did significantly better on two tests of listening vocabulary, and woman did significantly better on all other tests. However, some studies could not find a significant relationship between gender and listening comprehension. instance, Feyten (1991) looked at university students of French and Spanish. found that L1 listening ability was significantly related to foreign language listening comprehension. However, she failed to find a significant relationship between gender and any foreign language proficiency measure. Bacon (1992) looked at university students of Spanish and also failed to find a significant relationship between gender and listening comprehension. Similarly, Markham found no significant differences between men and woman ESL students in their level of comprehension though all listeners paid more attention to male speakers than to female speakers. Markham concluded that male speakers were prejudged by listeners to be more expert than female speakers.

Fifth, several studies have considered the role of background knowledge in listening comprehension. Long (1990, cited in Rubin, 1994) considered whether Spanish FL listeners comprehend better when they possess schemata relevant to the listening topic. The subjects were students enrolled in a third quarter university Spanish course. Before beginning the experiment, the students completed a survey of their background of the two subjects used namely "gold rushes" and "rock groups". Two measures of comprehension were used: a recall protocol and a recognition test consisting of paraphrased statements in English about the texts. According to the survey results, students possessed less information about gold rushes than about rock groups. Long found that recall protocols for the rock passage revealed a significantly higher number of correct idea units than the protocol for the gold rush passage. This suggested that background knowledge may be related to listening comprehension.

Schmidt-Rinehart (1992, cited in Rubin, 1994) also considered how topic familiarity and proficiency level affect recall measures of listening comprehension. Students from three sections of first, second and third quarter university Spanish classes listened to two passages, one about a familiar topic and another about a novel topic. Comprehension was assessed through a recall protocol. Results showed that both topic familiarity and course level affect measures of listening comprehension. All subjects recalled significantly more information from the familiar topic and the improvement in comprehension scores ascended with the quarter level. Finally, Chiang and Dunkel (1992) studied male undergraduate students at an intermediate level of English at the Chinese Naval Academy in the Republic of China. They used a 650 - word lecture on "the Amish people and the Pennsylvania Dutch Country" (a topic considered unfamiliar to students) and a 68- word lecture on "Confucius and Confucianism" (a topic considered familiar to students). They found that the students gained significantly higher scores on the familiar text than the unfamiliar text. In all studies, background knowledge is shown to enhance listening comprehension.

2.5.5 Process characteristics

The process of listening is probably more difficult to research than the other four factors because processes consist of internal operations which are not easy to measure directly. Processes refer to how listeners interpret input in terms of what they know or identify what they do not know and are classified as either top-down or bottom-up processing. Process also refers to the way in which listeners use different kinds of signals to interpret what is said, and this is known as listening strategies.

First, there is an ongoing discussion in L2 research as to whether listeners use their knowledge of the world, situations, and roles of human interaction to focus on meaning (top-down) and then use their knowledge of words, syntax, and grammar to work on form (bottom-up) or vice versa, and how these two interact. Wolf (1987, cited in Rubin, 1994) worked with 12-18 year old German students of English. Their proficiency level was beginning to low intermediate. Wolf found that while students appeared to make use of both bottom-up and top-down processes with an easy text, they used more top-down processing strategies for the more difficult texts. In contrast, Bacon (1992) found that students in a Spanish course used more top-down strategies with the more familiar passages. She suggested that listeners employed more bottomup strategies on more difficult input. Moreover, Hildyard and Olson (1982, cited in Rubin, 1994) found that skilled listeners use a knowledge -based interactive mode of text processing whereas less-skilled listeners attend mostly to local details. Shohamy and Inbar (1991) concluded that while high level listeners seemed to process the text in a knowledge-based manner, the low level test takers seemed to process the text in a data-driven manner. It could be noted that skilled listeners are better able to use topdown or knowledge-based processes whereas less skilled listeners tend to rely on bottom-up or text-based processes.

Second, there have been a number of studies involving the investigation of listening comprehension strategies used by L2 learners. With regard to ESL listening, Conrad (1985, cited in Rubin, 1994) found that as L2 listeners increased in proficiency level they relied more on contextual semantic cues than on syntactic or phonological cues. Murphy (1985, cited in Rubin, 1994) indicated that more proficient listeners tended to have an open and flexible use of strategies, while less proficient listeners most frequently depend on the text and a consistent use of paraphrase. O'Malley et al (1989) found that effective listeners used more self-monitoring, elaboration, and inference.

As for the study of EFL listening comprehension strategies, Rost and Ross (1991) used EFL students at three different colleges in Japan. The results showed that beginning listeners had a persistent pattern of asking for repetition, rephrasing or simplification, whereas more advanced listeners asked questions using information already given in the story and used backchannel communication. Huang and Naerssen (1987, cited in Teng, 1998) examined the learning strategies in oral communication used by EFL learners in China. They found that functional practice was the strategy that distinguished successful Chinese EFL learners from less successful students, and successful learners more often employed a strategy of willingness to take risks.

The following studies all looked at Chinese students in Taiwan. First, Chang et al (1995, cited in Teng, 1998) found that more subjects used a top-down approach than a bottom-up approach in EFL listening comprehension but found no difference in learner strategies between listening in a classroom situation and in a natural situation. Moreover, good listeners and poor listeners were similar in terms of listening strategies. Next, Katchen (1996, cited in Teng, 1998) asked subjects to summarize their weekly self-selected listening activities and comment on their listening skills. Results indicated that students made exciting discoveries about their own listening strategies and more easily observed various listening comprehension factors. Then, Lee (1997, cited in Teng, 1998) showed that the four EFL listening comprehension strategies most often used by subjects included asking speakers for repetition or paraphrasing, trying to understand each word, self-questioning for comprehension, and checking comprehension. Finally, Teng (1998) investigated the EFL listening comprehension strategies used by college students in Taiwan, using as subjects, 51 freshmen students from the National Yunlin University of Science and Technology who first received a listening test with 20 multiple choice questions, and then completed a questionnaire about listening comprehension strategies. The results indicated that among the six strategy categories 'compensation' was that most often employed by subjects, 'cognitive' was the next, and 'affective' was the least often used. Besides, among the whole 52 strategies, 'paying attention' and 'translating' were the individual strategies with the highest frequent use. Moreover, effective listeners used significantly more strategies than ineffective listeners in five of the six categories.

In conclusion, all of the above studies reviewed were directly related to the five factors affecting listening comprehension. The present research concerns the factor of task characteristics in the form of question use in listening comprehension. The reviewed studies about the use of questions in listening comprehension suggest that the position of questions differently affects students' comprehension ability. The results seem to indicate the positive results of while-listening questions. Also, the evidence strongly suggests that pre-listening questions and post-listening questions produce the same results. On the whole, the researcher is interested in investigating the effects of the pre-listening question and the post-listening question techniques on listening comprehension since none of the previous studies have investigated the effects of the pre-listening question and the post-listening question techniques on students exclusively. In addition, it should be worthwhile to conduct this research with Thai students paying attention to the effects of the pre-listening question and the post-listening question techniques on English listening comprehension. By so doing, English teachers teaching in Thailand may get useful information on the effects and benefits of using each method appropriately.