Listening Comprehension Research:
A Brief Review of the Past Thirty Years

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Abstract
This paper attempts to clarify what has and what has not been revealed in the literature so far in order to gain a better understanding of the nature of listening comprehension. First, in the section “A Historical Overview of Listening Comprehension Studies,” the changes that listening comprehension has undergone in the past few decades will be observed. Listening comprehension has long been regarded as a passive skill, and researchers considered it an ability that would develop without assistance. Around 1970, listening comprehension began to attract much attention and started to be explored. Some points have been revealed while others have remained unrevealed during the past thirty years. Then in the section “Components of Listening Comprehension,” the basic difference between written language and spoken language will be observed. It is important to note that the type of medium — sound versus print — will generate a wide range of input styles in spoken and written language (see the section “Features of spoken language”). In addition, the difference between written and spoken language comprehension will be discussed so that we can understand that listening comprehension imposes upon learners a different cognitive load from that of reading comprehension (see the section “Differences between listening and reading comprehension”). Furthermore, seven conceivable causes of obstacles to efficient listening comprehension will be identified (see the section “Potential problems in learning to listen to English”).

Keywords: listening comprehension, Cinderella skill, literature review

1. Introduction

Although listening is now well recognized as a critical dimension in language learning, it still remains one of the least understood processes. According to Morley (2001), during the 1980s special attention to listening was incorporated into new instructional frameworks, that is, functional language and communicative approaches. Throughout the 1990s, attention to listening in language instruction increased dramatically. Listening comprehension is now
generally acknowledged as an important facet of language learning; nevertheless, “much work remains to be done in both theory and practice” (Morley, 2001, p. 69). In this paper, an attempt will be made to clarify what has been discussed in the literature for the past thirty years.

2. A Historical Overview of Listening Comprehension Studies

Until recently, listening comprehension attracted little attention in terms of both theory and practice. While the other three language skills (i.e., reading, writing, and speaking) receive direct instructional attention, teachers often expect students to develop their listening skill by *osmosis* and without help (Mendelsohn, 1984: Oxford, 1993). In the osmosis approach (as it is cynically labelled by Mendelsohn (1984)), also known as the *Audiolingual method*, it is believed that if students listen to the target language all day, they will improve their listening comprehension skill through the experience. The fact that listening has been neglected or poorly taught may have stemmed from the belief that it is a passive skill and that merely exposing students to the spoken language provides adequate instruction in listening comprehension (Call, 1985).

The roots of audiolingualism lie in the early years of the 20th century, and had a significant influence on theories of language teaching. Among these were: (a) the entrenchment of positivistic pragmatism, (b) the blossoming of American structural linguistics and behaviorist psychology, and (c) the expression of scientific thought through formalisms (Johnson & Johnson, 1998).

Behaviorists drew inspiration from Pavlov's conditioning experiments, which promoted an account of behavior in terms of *stimulus* and *response* and suggested that these could be expanded into an ever-widening network through *association* and newly learned responses strengthened through *reinforcement*. Language development was thought to be explained in a similar way: languages are ultimately finite entities and might be learned through *imitation* and *practice*. This traditional approach to listening, which treated it as an enabling skill for production-oriented activities, “has trapped students in a frenzied ‘Hear it, repeat it!’, ‘Hear it, answer it!’,” or ‘Hear it, translate it!’ nightmare” (Meyer, 1984, p. 343).

In addition to the American Audiolingual Approach, the English language teaching programs of the British Situational Approach did not pay much attention to listening beyond its role in grammar and pronunciation drills and learners’ imitation of dialogues during the
1940s, 1950s, and 1960s (Morley, 2001).

Arguments for listening comprehension began to be voiced in the mid-1960s by Rivers, who has been “long an advocate for listening comprehension” (Morley, 2001, p. 70). Rivers (1966) had enough foresight to say that, “Speaking does not of itself constitute communication unless what is being said is comprehended by another person” (p. 196), and that “Teaching the comprehension of spoken speeches is therefore of primary importance if the communication aim is to be reached” (p. 204).

One of the events that brought about this paradigm shift was the Second AILA (International Association of Applied linguistics) Conference in 1969 which was held in Cambridge, England. As Morley (2001) states, in retrospect, the four themes that dominated the conference seem to have been prophetic in pointing the way toward the trends in second or foreign language education during the last quarter of the twentieth century. New views on the importance of the following issues were proclaimed at the conference: (a) individual learners and the individuality of learning, (b) listening and reading as nonpassive and very complex receptive processes, (c) listening comprehension’s being recognized as a fundamental skill, and (d) real language used for real communication as a viable classroom model (Morley, 2001).

Then, slowly and steadily, more attention has been given to listening comprehension. In the 1970s, the status of listening began to change from being incidental and peripheral to a status of central importance. Instructional programs expanded their focus on pragmatic skills to include listening as well as reading, writing, and speaking. During the 1980s, as researchers became increasingly interested in exploring the intricacies of this complex skill, more research, theory building, and curriculum development on listening comprehension were done. Throughout the 1990s, attention to listening in language teaching increased dramatically. Aural comprehension in second or foreign language acquisition became an important area of study.

Listening is now considered as an active skill that involves many processes. Byrnes (1984) characterizes listening comprehension as a “highly complex problem-solving activity” that can be broken down into a set of distinct sub-skills (p. 318). As Richards (1985) points out, “current understanding of the nature of listening comprehension draws on research in psycholinguistics, semantics, pragmatics, discourse analysis, and cognitive science” (p. 189).

Research into listening over the past three decades has, above all, highlighted the fundamental intricacy of the processes involved (Lynch, 1998). In order to comprehend spoken messages, listeners may need to integrate information from a range of sources: phonetic,
phonological, prosodic, lexical, syntactic, semantic, and pragmatic. The fact that we achieve all this in real time as the message unfolds makes listening “complex, dynamic, and fragile” (Celce-Murcia, 1995, p. 366).

Berne (1998) reviewed a growing body of literature related to L2 listening. This literature includes empirical research, such as the studies reviewed in Oxford (1993) and Rubin (1994) as well as those published in Flowerdew (1994). The L2 listening literature also includes a number of theoretical and pedagogical monographs, such as Ur (1984); Rixon (1986); Anderson and Lynch (1988); Underwood (1989); Rost (1990, 1991); and Mendelsohn and Rubin (1995). Berne points out that the following facts about L2 listening comprehension have emerged from the literature:

1. Familiarity with passage content facilitates L2 listening comprehension.
2. Lower-proficiency L2 listeners attend to phonological or semantic cues, whereas higher-proficiency L2 listeners attend to semantic cues.
3. The effectiveness of different types of speech modifications or visual aids varies according to the degree of L2 listening proficiency.
4. Repetition of passages should be encouraged as it appears to facilitate L2 listening comprehension more than other types of modifications.
5. The use of prelistening activities, particularly those that provide short synopses of the listening passage or allow listeners to preview the comprehension questions, facilitate L2 listening comprehension.
6. The use of videotape, as opposed to audiotape, as a means of presenting listening passages facilitates L2 listening comprehension, especially with regard to attitudinal and attentional factors.
7. The use of authentic, as opposed to pedagogical, listening passages leads to greater improvement in L2 listening comprehension performance.
8. Training in the use of listening strategies facilitates L2 listening comprehension and L2 learners can and should be taught how to use listening strategies.
9. Due to the complex nature of listening comprehension, L2 listening practice should encompass a wide range of situations where listening is required as well as different types of listening, different types of listening passages, different modes of presentation (e.g., live, videotape, audiotape), and different types of activities or tasks. (pp. 169-170)

In spite of the growing literature on listening comprehension, Berne also points out, by
analyzing the survey of language instructors she conducted, that there are gaps between L2 listening pedagogical theory and practice, and between L2 listening research and practice.

Carrier (1999) states that research in L2 listening has focused on identifying what factors are involved in the process of listening and how variation in these factors affects the product of listening comprehension. This research has centered on variables such as speech rate and pausing, stress and rhythmic patterning, sandhi variation, morphological and syntactic modifications, discourse makers, elaborative detail, memory, text type, and prior knowledge, as well as other psychological variables such as anxiety, self-confidence, and gender. However, Carrier also claims that “the majority of this research has focused on cognitive factors, and very little attention has been focused on the social context of listening,” (p. 75). She argues that, since (a) the social relationship has an effect on language behavior, (b) the social relationship has an effect on conversational interaction, and (c) conversational interaction has an effect on listening comprehension, the social relationships in an interaction may have an effect on listening comprehension.

Although listening comprehension is now well recognized as an important facet of language learning, much work remains to be done. Unfortunately, as Brown (1987) observed, a significant number of published courses on listening comprehension and classroom practices in many schools in many countries continues to demonstrate that listening is still regarded as the least important skill in language teaching.

And yet, despite a gradually increasing acceptance of the importance of listening comprehension for second or foreign language learners, the teaching of listening comprehension remains a somewhat neglected and poorly taught aspect of English in many ESL or EFL programs — the Cinderella skill (Mendelsohn, 1994; Nunan, 1997; Vandergrift, 1997).

3. Components of Listening Comprehension

Lund (1991) says, “An interesting paradox connects second language listening and reading: listening has enjoyed a theoretically eminent, if not preeminent, place in virtually all approaches to language teaching since audiolinguism, but research efforts have been devoted largely to reading” (p. 196). For a long time, researchers believed that comprehension is a general construct that applies to both reading and listening. However, it is now realized that listening is a set of skills in its own right, and that research may not automatically transfer
A unique characteristic of listening comprehension is that “it exists in time, rather than space — it is ephemeral in nature” and that “the sound system of the second language poses a significant problem” (Lund, 1991, p. 201). Thus, we have to bear in mind that listening comprehension requires substantially different skills from those required for reading comprehension.

3.1 Features of spoken language

Spoken language is very different from written language. Buck (2001) points out that there are three characteristics of speech that are particularly important in the listening comprehension construct: (a) speech is encoded in the form of sound; (b) it is linear and takes place in real time, with no chance of review; and (c) it is linguistically different from written language (p. 4). Let us explain each of these characteristics one by one.

First, the difference of medium, sound versus print, will generate a wide range of input styles in spoken and written language. The acoustic input is often very indistinct; speakers can modify the sounds considerably and all the phonemes may not be clearly and unambiguously encoded in the message. Phonological modifications include assimilation, elision, intrusion, which are often made according to a set of very complex rules. Furthermore, in English, the function words usually have two pronunciations, a strong form and a weak form. Such modifications to pronunciation taken place during fast speech, especially informal speech, are so extensive that nearly all the words are affected. Stress and intonation are also important features of spoken language. Speakers stress words that they think important. Similarly, the intonation pattern of the utterance, which is closely related to the structure and meaning of the text, is usually important. Thus, prosodic features of spoken language remain important even in very fast speech, although many of the individual sounds may be either indistinct or missing.

Second, the real-time nature of spoken language is also an important component of listening comprehension construct. Speech takes place in real time in that the text is heard only once and then it is gone unless listeners ask speakers to repeat what was said. Therefore, in most cases, listeners must process the text at a speed determined by speakers, which is generally quite fast, and cannot refer back to the text so that all that remains is a memory of what was said, which is often imperfect.

Third, speech and writing are both variants of the same linguistic system, but they are
linguistically different from each other. In speaking, especially in informal situations, people do not usually speak in sentences but speak with short phrases or clauses, called idea units, strung together in a rather loose way. The vocabulary and the grammar also tend to be far more colloquial and much less formal. There are many words and expressions that are only used in speech, never in writing. Buck (2001) summarizes major linguistic differences between spoken and written language as follows:

1. In spoken language idea units tend to be shorter, with simpler syntax, whereas written idea units tend to be more dense, often using complex syntax, such as dependent and subordinate clauses, to convey more information.
2. In spoken language idea units tend to be strung together by coordinating conjunctions (and, or, but etc.), whereas written idea units tend to be joined in more complex ways.
3. Spoken language usually has hesitations: pauses, fillers, and repetitions that give the speaker more thinking time, as well as repairs, such as false starts, corrections in grammar or vocabulary, and afterthoughts.
4. Spoken language tends to have more non-standard features such as dialect, slang, and colloquialisms, whereas written language tends to be far more formal, conservative and ‘correct.’
5. Spoken language tends to be far more personal, with more emotional involvement and much less precision. Speakers tend to indicate their feelings more, with expressions such as ‘I think’ or ‘I mean,’ or by making direct reference to the listener. They also tend to be content with gross approximants, or use overstatements and exaggerations. (pp. 10-11)

It must be noted, however, that such differences are a matter of degree. It is argued that texts can be ranged along an oral-literate continuum, with oral texts at one end, having more characteristics of spoken language that are typically associated with casual conversation, and literate texts at the other end, having more characteristics of written language that are especially associated with expository written prose (Tannen, 1982, 1985 cited in Buck 2001).

3.2 Features of spoken language

Even though listening comprehension has held an important place in language teaching, most second or foreign language research into comprehension has been concerned with reading (Lund 1991). Many researchers assumed that comprehension was a general construct
and that the principles of reading comprehension also applied to listening (Anderson, 1983, 1985; Flowerdew, 1994; Lund, 1991; O’Malley, Chamot, & Küpper, 1989).

Although there is an overall high correlation between reading and listening comprehension abilities, it has recently been shown that listening involves a set of skills in its own right (Long, 1989). As Flowerdew (1994) points out, the distinctive features of listening comprehension can be grouped under two main headings: real-time processing and phonological and lexico-grammatical features (also in Buck, 1991, 1992; Lund, 1991; Rost, 1990).

First, one of the major differences is that listening comprehension involves real-time processing. As mentioned earlier, “listening text exists in time rather than space” (Flowerdew, 1994, p. 10), so that listeners must comprehend the message as it is uttered. Listening involves “attention to a continuous stream of speech which is not under the timing control of the listener” (McDonough, 1995, p. 34). In reading, on the other hand, readers have considerable control over the texts and they can dwell on parts of the text, skip over other parts, backtrack, etc (Buck, 1991, 1992; Ferreira & Anes, 1994; Lund, 1991; Rost, 1990).

A second important difference between listening and reading comprehension is that the listener must phonologically recognize unit boundaries that would be marked visually in a written text. Readers can see word boundaries and sentence boundaries, because they are clearly marked by spaces and periods. Even sentence-internal clause boundaries are sometimes visible by commas. On the other hand, word and phrase boundaries are not so clearly marked in spoken language. Listeners themselves must punctuate a flow of speech by recognizing irregular pausing, false starts, hesitations, stress, and intonation patterns. In addition to the phonological features, spoken text has its own particular lexico-grammatical features, which require the application of particular sets of knowledge on the part of listeners.

Furthermore, Thompson (1995) says that we should consider the special effect that the aural medium has on listening comprehension. For one thing, listeners, unlike readers, must comprehend the text as they listen to it, retain information in memory, integrate it with what follows, and continually adjust their understanding of what they hear in the light of prior knowledge and incoming information. This processing imposes a heavy cognitive load on listeners.

In addition, people recall less information from listening than from reading in terms of both quantity and quality. According to Lund (1991), lower-level listeners benefit less from hearing a passage again than from rereading a text. This means that repeated presentations
of the listening passage will not be particularly helpful to low-level listeners, whereas more advanced listeners will be more likely to profit from hearing the passage several times.

One final point is that the heavy processing load imposed on listeners causes them to lose concentration rather quickly. Thompson and Rubin (1996) reported that listening materials longer than 2.5 minutes were too long for less proficient listeners so that they could not maintain full concentration, and that the optimal length appeared to be in the range of 30 seconds to two minutes.

Then a question arises: Given the differences between listening and reading comprehension, why would it be that reading comprehension has been studied more extensively than listening comprehension? Ferreira and Anes (1994) give us three plausible reasons from a psycholinguistic point of view.

First, it is easier and less expensive to study written language than spoken language. To conduct an experiment on sentence processing using the *moving window technique*, for example, all that is required is a personal computer and some software for collecting button-press times. To study listening comprehension, in contrast, it “requires not just computer equipment and software, but also equipment for auditory recording sentences and playing them to subjects (tape player, microphone, speakers, headphones), and ideally also hardware and software for digitizing speech and manipulating speech files” (Ferreira & Anes, 1994, p. 35).

A second reason is that, when we prepare listening passages to study listening comprehension, we must decide what the prosodic characteristics of the sentences will be, and those characteristics either have to be equated across conditions (if the experimental hypotheses do not involve prosodic variables) or manipulated systematically (if prosody is under investigation).

The final and most important reason has to do with the availability of appropriate tasks. In reading comprehension studies, especially in sentence comprehension studies, it is widely acknowledged that the best task for studying sentence comprehension is *eye-movement monitoring*, because it allows the experimenter to examine moment-by-moment changes in processing load continuously and unobtrusively. The moving window technique, using a window size of one word, is also considered to be a good method (Just, Carpenter, & Woolley, 1982 cited in Ferreira & Anes, 1994).

In listening comprehension studies, however, there is no comparably sensitive *on-line* task that can monitor listeners’ moment-by-moment changes while they are processing incoming
information.2

3.3 Potential problems in learning to listen to English

Underwood (1989) offers seven conceivable causes of obstacles to efficient listening comprehension, most of which are related to what was already mentioned.

First, listeners cannot control the speed of delivery. Underwood says, “Many English language learners believe that the greatest difficulty with listening comprehension, as opposed to reading comprehension, is that the listener cannot control how quickly a speaker speaks” (Underwood, 1989, p. 16).

Second, listeners cannot always have words repeated. This is a serious problem in learning situations. In the classroom, the decision as to whether or not to replay a recording or a section of a recording is not in the hands of students. Teachers decide what and when to repeat listening passages; however, it is “hard for the teacher to judge whether or not the students have understood any particular section of what they have heard” (Underwood, 1989, p. 17).

Third, listeners have a limited vocabulary. The speaker may choose words the listener does not know. Listeners sometimes encounter an unknown word, which may cause them to stop and think about the meaning of that word and thus cause them to miss the next part of the speech.

Fourth, listeners may fail to recognize the signals, which indicate that the speaker is moving from one point to another, giving an example, or repeating a point. Discourse markers used in formal situations or lectures such as “secondly,” or “then” are comparatively evident to listeners. In informal situations or spontaneous conversations, signals are more vague as in pauses, gestures, increased loudness, a clear change of pitch, or different intonation patterns. These signals can easily be missed especially by less proficient listeners.

Fifth, listeners may lack contextual knowledge. Sharing mutual knowledge and common context makes communication easier. Even if listeners can understand the surface meaning of the text, they may have considerable difficulties in comprehending the whole meaning of the passage unless they are familiar with the context. Nonverbal cues, such as facial expression, nods, gestures, or tone of voice, can also be easily misinterpreted by listeners from different cultures.

Sixth, it can be difficult for listeners to concentrate in a foreign language. In listening comprehension, even the shortest break in attention can seriously impair comprehension.
Concentration is easier when students find the topic of the listening passage interesting; however, students sometimes feel listening is very tiring even if they are interested because it requires an enormous amount of effort to follow the meaning.

Seventh and last, students may have established certain learning habits, such as a wish to understand every word. By tradition, teachers want students to understand every word they hear by repeating and pronouncing words carefully, by grading the language to suit their level, by speaking slowly and so on. Consequently, students tend to become worried if they fail to understand a particular word or phrase and they will be discouraged by the failure. It is thus sometimes necessary for students to tolerate vagueness and incompleteness of understanding.

4. Conclusion

Listening comprehension has been neglected in research and practice until quite recently. Even now, we cannot say that listening comprehension research abounds in the literature when compared to that of reading comprehension. This is why some researchers call listening “Cinderella skill in second language learning” (Nunan, 1997, p. 47). However, it is true that listening is vital in language learning in that it provides input for the learner. Without understanding inputs, students cannot learn anything.

The process of listening comprehension is highly complex. The knowledge and skills necessary for listening comprehension must be all utilized simultaneously. However, our processing space is limited. Before we can sort out what has we just heard, the speech disappears. What is worse, we cannot get the speech repeated. We must comprehend the text as we listen to it, retain the information in memory, integrate it with what follows, and continually adjust our understanding of what we hear in the light of prior knowledge and incoming information. Given this heavy processing load, listeners may lose concentration rather quickly and sometimes give up listening all together. Less proficient learners of English as a second or foreign language have even more serious problems. Many of them are fully occupied with identifying the words used in the speech, and there is almost no space for top-down processing. A situation like this is a long way from the successful listening.

To relieve the above-mentioned difficulties of listening comprehension, one of the effective ways is to reduce the speech rate. Most learners having difficulty in comprehending aural texts identify the reason for their failure as being due to the rapidity of speech. For them, the speech is too fast to follow. Modified forms of speech, such as caretaker talk and foreigner talk,
are all characterized as slow speech with longer and more frequent pauses at constituent boundaries. The potentialities of silent pause phenomena that can aid listening comprehension will be discussed in several works (e.g., Blau, 1990; Kohno, 1993; Osada, in press; Suzuki, 1991).

Notes

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1. As Buck (2001) noted, these differences were developed through the study of English, and therefore, it is uncertain as to what extent these differences are universal.

2. Ferreira and Anes (1994) also say that off-line tasks (tasks that do not measure changes in processing load) can work just as well as on-line task according to the research purpose.

References


