Pronunciation-based Listening Teaching

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Abstract

This paper is intended to suggest how to improve Korean high school students' awareness of the pronunciation in order to foster communicative effectiveness. Initially it is focused on the tasks of listening to the suprasegmental aspects.

The strategies used in the listening process are (1)discerning intonation units, (2)recognizing rhythm pattern, and (3)identifying contraction and linking in connected speech. The tasks including in each process are listening discrimination, guided practice activity, and listening and speaking activity. The teacher should avoid methods which yield discouraging outcomes and try to help students enjoy experience of success in doing exercises and activities.

So I suggested: students put the slash on the pause perceptible to chunk the stream of speech into the intonation units, and mark the content words to internalize English rhythm. And then I suggested that students listen to pop song English in order to improve the awareness of function words and connected speech in the intonation unit.

1. Introduction

In the traditional approach to teaching pronunciation, segmentals are concentrated and occasionally followed by some brief superficial attention to stress and intonation. But suprasegmentals are extremely important in the communication of meaning in spoken language. What is more, being able to comprehend or convey the intended attitude in English depends on mastery of suprasegmentals. They are far more important and central to communication than accurate production of the individual sounds, because individual sounds can usually be inferred from the context. Therefore, a short term pronunciation class should focus first on the comprehensibility of learners'

English. Especially in listening class, top-down processing is more important than bottom-up processing according to the proficiency levels, so learners should be aware of intonation and stress, and get used to them. When listening to spoken English, learners initially need to perceive and chunk the incoming stream of speech in order to make sense of it. At the word level, the stress patterns of English words and the information that unstressed syllables can convey as well as vowel and consonant sounds are an important part of teaching listening discrimination. That is, the ability to process, segment, and decode speech depends not only on the listener's knowledge of lexicon but also on being able to exploit knowledge of the sound system(Laufer 1990). Clearly, the incoming stream of speech is not decoded at the word level alone. At the sentence level, listeners process incoming speech by bottom-up processing while actively attending to context, and also call up their background knowledge, or schemata, to help them make sense of the bits and pieces of information they perceive and identify.

In addition, nonnative speakers have to overcome other obstacles, that is, lack of background knowledge (including cultural gaps) and lack of knowledge of the sound system to English. These obstacles, as well as incomplete knowledge of English grammar and vocabulary, can distort their perception when they listen to English. In fact, there is an important intersection between pronunciation and listening comprehension. Thus the purpose of this paper is to suggest how to improve learners' awareness of the suprasegmental aspects of English at the sentence level as well as at the word level in order to foster communicative effectiveness.

2. Intonation

2.1 Intonation units

One of the most important speech processing is to divide into chunks of speech, or intonation units¹⁾: these intonation units correspond to phrases, clauses, or

¹⁾ This term "intonation unit" is often similar to phonological phrase(Nespor and Vogel, 1986), tone group(Halliday, 1967a), and intermediate phrase(Pierrehumbert, 1988). It

utterances, according to how speakers organize their thoughts. The term thought group or sense group refers to a semantically and grammatically coherent chunk of speech. Similarly, the term intonation unit or tone group describes this same chunk of speech but refers also to the fact that this unit of speech has its own intonation contour of pitch pattern and typically contains one prominent element - nucleus. A single utterance or sentence may include several intonation units, each of which has its own prominent element and contour. The prominent element will usually be identified as the last lexical word - that is, the element which carries 'end weight' in the intonation unit and which people tend to remember best precisely because the last content word is before the pause. Also there exists the movement of pitch in each intonation unit, and the last pitch movement is greater than the previous ones in the long sentence. The only real exceptions to this tendency may be time phrases. Time phrases are very frequently placed last in the intonation unit and do not receive the nucleus except for using contrastively.

In general, the most likely break is between the two major constituents of the sentence, subject and predicate. The next most like break will occur within a long subject phrase and/or within a long predicate phrase. This break will also depend on the constituent structure - in each case a clause or phrase which modifies the subject or predicate, gives extra information about them, is likely to be separated off into an intonation unit of its own. In spoken English, one salient feature of chunking speech is the pause between intonation units. The other features are lengthening, pitch movement and so on.

In rapid speech, intonation units may be fairly long; in slower speech, they may be shorter, and breaks between units will be more frequent. Such divisions are dependent on the individual speaker and the performance context. Public speakers tend to pause frequently to make their message clearer or more emphatic, as in a following political statement.

I promise / to serve / my fellow citizens / to the best / of my ability.

sometimes corresponds to intonational phrase, and has obligatory pause at the boundary.

By contrast, if in another context the speaker is communicating urgency, the intonation units may be longer and the speech may contain fewer breaks.

> I promise that I'll get you the back-ordered merchandise / just as soon as it arrives in the warehouse.

The one thing to keep in mind is that too many pauses can slow speech down and create too many prominent elements, causing the listener difficulty in processing and comprehending the overall message. On the other hand, blending and linking which occur within intonation units but do not across unit boundaries, also cause difficulty in fast speech. Thus the teacher should help students recognize intonation units with normal spoken English and with written texts which have the pauses already marked. Students should follow along when they listen to tape recorders or teacher's reading. Next time students themselves mark the pauses to divide into the intonation units.

Chunking into intonation units is similar to phrasing in music. Thus the teacher can use pop song English to help students mark the phrase where the beat is always lengthened or rested.

- 1. Listening Discrimination
- *Listen to these short sentences and long sentences, and compare them.

He had a bad dream.

The man at the desk / was asking us questions.

My watch is broken.

Three new students / came to class today.

Stan's wearing his glasses. I met my best friend / on a plane yesterday.

And I won't be surprised if it's a dream. /

Everything I want the world to be / is now coming true especially for me / And the reason is clear / It's because you are here /

You're the nearest thing (/) to heaven that I've seen./

^{2.} Pop Song English

^{*} Listen to the pop song and put a slash after the lengthened beat or rest. Such a feeling's coming over me / There is wonder in most everything I see/ Not a cloud in the sky (/) got the sun in my eyes (/)

2.2 intonation patterns

Intonation means different things to different people. Intonation refers to the use of suprasegmental phonetic features to convey 'postlexical' or sentence-level pragmatic meanings in a linguistically structured way(Ladd, 1996). In other words, intonation is central to conveying meaning in spoken English and the attitude of the speaker towards what is being said. If pitch represents the individual tones of speech, then intonation can be thought of as the entire melodic line. The movement of pitch within an intonation unit is referred to as the intonation contour.

Students must grasp the function of intonation in conveying attitude and be able to recognize the difference between different intonation contours. Final falling intonation is the most common pattern used in the production of English sentences. It is used in most statements, commands, and wh-questions. Final rising intonation is used primarily in 'yes-no' questions. The rising pitch indicates to the listener that the speaker genuinely does not know whether the answer is yes or no. The listener in all cases is required to determine the 'meaning' behind the speaker's questions and should respond appropriately. This not only assesses the listener's awareness of what is being asked, but also the speaker's ability to produce the appropriate intonation pattern. Complex sentences often have two separate intonation patterns. The intonation contour in the first half of the sentence is a non-final rising-falling contour. Some complex sentences display a continuation rise in the first half.

1. LISTENING DISCRIMINATION.

*Listen to these statements. Each statement has stress on the last syllable. Practice making the tone rise and fall on the same syllable.

- 1. He feels sad.
- 2. It's time to go home.
- 3. They can't spell the word.

- 4. She didn't know my name.
- 5. Lisa wants to take a class.
- 6. We don't get up at eight.

- 2. INTERACTIVE PRACTICE. Rising/Falling Intonation
- * Here is a list of topics. With a partner, take turns talking about things you like.
 - A: My favorite day of the week is Saturday.
 - B: That's interesting. My favorite day of the week is Tuesday.

TOPICS

color hobby TV program season food sport kind of movie kind of music

3. Rhythm Patterns

3.1 Word Stress

A learner's command of segmental features is less critical to communicative competence than a command of suprasegmental features, since the suprasegmentals carry more of the overall meaning load than do the segmentals. Learners who use incorrect rhythm patterns or who do not connect words together are apt to frustrate to the native-speaking listener; more seriously, if these learners use improper intonation contours, they can be perceived as abrupt, or even rude; and if the stress and rhythm patterns are too nonnativelike, the speakers who produce them may not be understood at all.

From the listener's point of view, the most salient features of stress are probably longer vowel duration in the stressed syllable and higher pitch. Initially, learners need to understand the stress pattern of every English word containing more than one syllable. They also need to understand that even if all the individual sounds are pronounced correctly, incorrect placement of stress can cause misunderstanding. Thus, teachers should clarify:

- 1 how native speakers highlight a stressed syllable (longer, louder and higher)
- 2 how they produce unstressed syllables (often with vowel reduction)
- 3 what the three main levels of stress are (strongly stressed, lightly stressed, unstressed)

4 where the word stress is placed (stress placement in English words is usually rule-governed, and some predictable)

1) Stressed Syllable

First, teachers need to be sure that students can hear the difference between stressed and unstressed syllables. In one exercise, students listen to the words that share a stress pattern and then circle the number of the syllable that receive the most stress in each group.

1-②-3	1-2-3	1-2-3-4	1-2-3-4
dictation embarrassed	president envelope	regulation satisfaction	military ordinary
Cintoarrassed	···	· · ·	ordinary

Second, students must decide whether the word they hear has three of four syllables, then determine the pattern by comparing it to a model word.

• • •	. • .	. •	• • • •
adjective	example	ability	education

potential	photographic	elephant	tradition
community	hospital	professor	philosophy

.

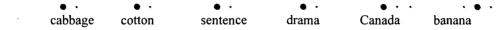
2) Vowel Reduction

spelling	a	e	i	0	u
stress	• •	• •	• •	• •	• •
group A	palace distant	college rocket	tulip promise	purpose anchor	minute circus
stress	. •	. •	. •	. •	. •
group B	advice machine	reveal expect	divide ignore	offend tonight	suggest suppose

Students should be able to notice that in spite of five different vowel letters in

unstressed vowels, they are all pronounced in almost the same way. In English, many vowel letters in the unstressed syllables are all pronounced as reduced vowels, "schwa". Schwa is represented by the phonetic symbol $\frac{1}{2}$ or $\frac{1}{2}$.

In EFL class, students have to be taught explicitly to reduce unstressed vowels to schwa. Korean students have much difficulty in learning to reduce vowels to schwa, because Korean is a syllable-timed language. Teacher can help students listen to the following words and recognize the difference in the pronunciation of the vowels in each word in spite of the same vowel letter.



3) Major Stress and Minor Stress



Within a word structure, generally, heavy syllables are stressed. Especially if the last syllable is a superheavy syllable, it is stressed. Both syllables in the words above are stressed but the first syllable receives stronger stress than the second. The first one is major stress (strongly stressed) and the second is minor stress (lightly stressed). Thus students should be taught to be aware that the syllable with minor stress is not reduced to schwa.

4) Stress pattern

The major stress on two-syllable words is more likely to fall on the first syllable if the word is a noun, and on the second syllable if the word is a verb. Students can come to this conclusion themselves through the examples. Also related noun-verb pairs are good examples of difference in stress on nouns and verbs. With three-syllable words, the major stress falls on the first or second syllable. Many words stressed on the first syllable receive minor stress on the final syllables.

In compound words, the first word receives major stress and the second one minor stress. With certain suffixes in English, the placement of major stress is predictable. Teacher can illustrate the related words with a stress shift.

Nouns	Verbs	Numbers	Compounds
• · table	begin	thirty thirteen	• • hairstyle
language	arrive	forty forteen	drugstore
teacher	describe	fifty fifteen	blackboard
record	record	sixty sixteen	airplane
protest	protest	seventy seventeen	greenhouse
• • •	. • .	. •	• •
traveler	discover	advertise	come back
visitor	develop	pacify	sit down
instructor	behavior	organize	pick up
nervously	election	photograph	keep on
happiness	construction	crocodile	figure out
instrument	location	recognize	get through
melody	vacation	interview	New York
grocery	attention	attitude	Great Britain
factory	mechanic	exercise	Red Sea
bicycle	historic	graduate	First Avenue
usual	romantic	fascinate	South Korea
• • •	. •	· • •	• · · • · ·
photograph	photography	photographic	able ability
democrat	democracy	democratic	history historical
	economy	economic(al)	grammar grammatical

3.2 Sentence Stress and Rhythm

Sentence stress refers to the various stressed elements of each sentence. In particular, English is a stressed-timed language. So strong and weak alternation occurs at regular intervals. In both multisyllabic words and simple sentences there are similarities in stress patterns as followings:

. • .	• . •		• .	. •
abandon	guarantee		mother	attend
I saw you.	Have some cake.		Do it.	You did?
We found it.	Where's the beef?	F	Pay them.	It hurts.

• • • •	• • • • •	
education	nationality	
John's lawyer.	Where's your bicycle?	
Mary saw it	Come to Canada.	
communication	identification	
I want a soda.	We took a vacation.	
I think he's got it.	I went to the station.	

Word and sentence combine to create the rhythm of an English utterance - that is, the regular, patterned beat of stressed and unstressed syllables and pauses. This rhythmic pattern is similar to the rhythm of a musical phrase. Just as in music, English moves in regular, rhythmic beats from stress to stress - no matter how many unstressed syllables fall in between. This stressed timed rhythm of English is the basis for the metrical foot in English poetry and is also strongly present in chants, nursery rhymes, and limericks.

In setting texts to music, what is important is for stressed syllables of polysyllabic words to be associated with notes at musically strong positions - on the beat. Stressed syllables are not necessarily associated with long or high-pitched or saliently loud notes. When the stressed syllable comes out off the beat, it is the ill-formed association of texts to music (Liberman, 1975).

1) Initially, students listen to some sentences and mark the stressed elements. They should notice that stress usually falls on the content words - the words that carry the most meaning. During the second listening, students can snap the fingers or tap lightly in their desks to experience how the stressed words tend to come at regular intervals.

She doesn't like to hurry.

Her father cleaned the basement.

I didn't want to leave her.

They need some new pajamas.

He wanted to help her forget. We needed to call them at ten. It's better to hide it from John. I think that he's doing it wrong. 2) Next, students practice a guided activity focusing in sentence stress. Students get cards with professions and places to work written on them. They should exchange personal information about professions with appropriate sentence stress.

A: What do you do?

B: I'm a doctor / and I work in a hospital.

B: What do you do?

C: I'm a professor / and I lecture at the university.

JOBS; travel agent designer engineer architect nurse teller dentist

letter carrier

4. Connected Speech

singer

producer ...

The characteristic stress and intonation patterns of English have a profound effect on the pronunciation of sounds in connected speech. In particular, the fact that function words in English are generally unstressed and reduced makes them almost unrecognizable to beginning EFL students. In addition, they often attempt to pronounce each individual word so clearly that they fail to blend words within a single intonation unit smoothly. All languages have some rules concerning adjustments in connected speech; so teaching the rules specific to English is necessary. First, in connected speech, function words are normally unstressed and pronounced in their weak forms. They are also linked with preceding or following content words, causing the difficulty in listening comprehension. Thus the teacher should initially present the connected speech phenomena, and then help students figure out the rules. Next listening practice and some activities should be given students and combined with a particular teaching point.

4.1 Function Words

movie star

pilot

1) The vowel is reduced to schwa in function words.

He went to the store.

Give them a break.

Apples and oranges.

As sweet as sugar.

A cup of coffee.

2) An initial consonant can be lost, as with the pronouns he, him, her, and them.

Where did he go?

Have you seen him today?

I watched her do it.

I watched them last night.

3) Some function words lose their final consonants. This is particularly true of 'of' and 'and'.

A cup of coffee. A lot of money. Cream and sugar. Now and then.

Due to the reduction of function words in phrases, some phrases can sound like single words.

All of her seems ripped.

Oliver seems ripped.

4) Contractions always involve the loss of the initial consonant of the auxiliary verb. In written form the vowel is also lost. Whether the vowel is lost in spoken form depends on the preceding sound: vowel or consonant.

Contraction with 'will' and 'have': /l/ and /v/(A) vs. $\frac{\partial l}{\partial v}$ and $\frac{\partial v}{\partial b}$

A They'll arrive soon.	B John'll arrive soon.
They've finished.	The men have finished.

Contraction with 'would' and 'had': /d/(A) vs. /\(\phi\)d/(B)

A I'd like to see you.	B The boss would like to see you.
He's never seen it before.	Bob had never seen it before.

Contractions with 'is' and 'has': /s/, /z/, /əz/ (following the Plural Rule)

The boss is mad.	The church has been closed.
What's the matter?	My cat's been sick.
The dog's outside.	Who's been asking anyway?

Contraction with 'not': the contractions are stressed with the strong forms of the auxiliaries because of 'not'.

She can't hear me. [kænt] He hasn't left. [hæznt] He isn't leaving. [iznt]

4.2 Liking

In connected speech, words within the same phrase of sentence often blend together. Connecting groups of words together is referred to as linking.

1) Linking consonants to vowels

When a word that ends with a consonant is followed by a word that begins with a vowel, the consonant seems to become part of the following word. This is especially true when the word beginning with a vowel is a function word.

2) Linking consonants to consonants

When a word that ends with a stop consonant is followed by a word that begins with a consonant, the stop consonant is usually not released. The tongue of lips will move to the place of articulation of the stop consonant and then move immediately to the place of articulation for the next consonant. As in the words 'pitcher' and 'picture', linking occurs within and across words.

stop trying pet crocodile big boy log cabin good judge big church let down sit down big zoo keep speaking

3) Linking identical consonants

Very often the consonant that ends on word is identical to the consonant that begins the next word. The two consonants are usually pronounced as one long consonant.

keep practicing hot tea black cat grab Bill played dart
if Fred with thanks ice skating less serious fall leaves

4) Linking vowels to vowels

Linking with a glide commonly occurs when one word or syllable ends in a tense vowel or diphthong and the next word or syllable begins with a vowel.

Be a sport. Play a game. Tie it up. Boy ate an apple. through it all slow and steady Let's go on How are you?

5) Deletion of consonants

In connected speech, final consonant clusters are often simplified. If the following word begins with a vowel, then the final consonant of the cluster will be linked to

that following vowel and therefore, cannot be deleted. However, if the following word begins with a consonant, the final consonant is usually unreleased and can even be deleted as the examples below show.

nd	band shell	blind man	kindness	windmill	hands
ft	left field	left side	softness		
st	past president	last Friday	postman	restless	
st	next month	East side	textbook		

Student Worksheet

Linking consonant to vowel

1. Listen to some words and some pair of words. Compare them.

visit, is it butter, what are service, serve us

notice, wrote us

- 2. Rule: When the last sound in a word is a <u>consonant</u> and the first sound in the following word is a <u>vowel</u>, pronounce them as one word.
- 3. Listening Discrimination

Listen to the short sentences and underline linked words you hear. In the second listening, fill the blanks with the two words which are linked.

1. He gave us some paper.

1. All of the students came.

- 2. She explained their idea.
- 2. Please drive us to the store.

3. His answer was right.

- 3. Don't leave any money here.
- 4. Listening Discrimination and Speaking

Partner 1, use this page. Partner 2, turn to next page.

First say some sentences with linking words in your sentences. Then ask your partner, "What is it?" your partner is going to answer with a short sentence.

YOU:

It's a room in top of a house under a roof. What is it?

Your Partner: I know what it is. It's an attic.

1. It's a part of a body. A hand is at the end. What is it?

Now listen to your partner's sentences and answer using a word from the list. Link words in your answer.

WORDS; actor, egg, envelope, orange, office, airplane

4.3 Palatalization

When the consonants /s, z ,t, d/ are followed by /y/ in and unstressed syllable, the two sounds combine to form a palatalized consonant:

Pass your plate. Please yourself. Why don't you eat your soup?

Would you mind? Did you tell him what you saw?

4.4 Flapping

The pronunciation of the /t/ in 'putting' sounds like the /d/ in 'pudding' (latter/ladder, better/bidder). The tongue touches the tooth ridge and is quickly pulled back. This flapping is one of the major differences between American English and British English. It only occurs between vowels when the preceding vowel is stressed. Students should be aware of the difference between the aspirated and flapped /t/'s in similar positions. In NAE, /t/ is glottalized because the air moving out from the lungs is momentarily blocked at the glottis. In a fast speech, flapping also occurs across the word level.

Flapped /t/	Aspirated /t/	Glottalized /t/	I got a charge out of that.
citizen	citation	button	The light at the end of the tunnel.
meter	material	mountain	The policeman sho <u>t a</u> t him.
water	attend	fountain	He cut a lot of wood yesterday.
total	hotel	certain	Shu <u>t u</u> p.
later	retire	curtain	Ge <u>t out of</u> here.

Lastly, in spoken English there are some phrases like 'wanna', 'gonna', 'dunno'. When 'want' and 'going' are followed by 'to' in verb, they are pronounced [wanə] and [gənə]. Because these reduced forms blend in with the overall rhythm of English sentences, students should be taught to notice these reduced forms, especially in listening to native speaker. The common expression 'I don't know' is frequently pronounced as 'I dunno'. Also the word 'Toronto' is pronounced as 'tranow'. When ESL/EFL students use this type of pronunciation, it often sounds unnatural. This unnaturalness stems from the fact that the overall rhythm of the sentence is incorrect and the reduced forms stand out. The teacher should not insist in having our students produce these forms until their spoken English is fairly advanced. For an integrated task of connected speech, pop songs are very useful and motivating to students. When listening to pop songs, the teacher can provide students with the tasks such as:

dividing into intonation units, filling the content words, and filling the linking words.

Student Worksheet

Pop Song Listening

- * Listen to the pop song and fill in the blanks.
- I cried the tear. / You wiped it dry. / I was confused. / You cleared my mind. /
- I sold my <u>soul</u>. / You bought it <u>back</u> for me, / and <u>held me up</u> / and gave me <u>dignity</u>. / Somehow you needed me./

You gave me strength / to stand alone again, / to face the world / out in my own again./
You put me high / upon a pedestal, / so high that I could almost see eternity. /
You needed me. / you needed me. /

Listening Order

- 1.Students listen to the pop song and mark the intonation units with slashes after blanks, in which the most prominent contents words will be filled.
- 2. Students fill the blanks with content words.
- 3. Next, students are given the new blanks and fill the linking words:
 ex) cried, wiped, cleared, sold, bought, held, gave, needed, stand, face, almost see

5. Conclusion

The very close, careful listening is required to discriminate functionally distinct sounds and prosodic patterns and to divide the stream of speech into words and phrases, and it is not an easy skill to master in EFL. It requires time, effort, and practice. In fact, after intermediate students received explicit instructions in listening discrimination, they showed significant improvement at perceiving critical differences and also more confidence about learning. Such self-monitoring skills are very useful to most students who wish to improve their listening comprehension and their pronunciation.

If students are on the intermediate level, the teacher can try to improve listening skills holistically by using partial or whole dictation. These procedures are like the following: chunking continuous speech into intonation units; using prosodic patterns to identify intonation unit boundaries; and recognizing and processing contractions, linkings, and various other phrase-level reductions.

Intonation, stress, rhythm, and adjustments in connected speech can be easily overlooked in the language classroom. Nonetheless, these invisible signals are among the main clues used by listeners to process incoming speech and are thus of primary importance in the stream of normal speech. This paper suggests that lack of internalized knowledge about English stress and intonation can contribute to an inability to perceive, interpret, and evaluate spoken English -not to mention an inability to speak it comprehensibly. What is important is that as students progress to more advanced stage, they must also move beyond the clear and explicit pronunciation, and be exposed to some English as it is normally spoken. Ideally the material should be presented on a tape, which can be played again and again and help teachers avoid the limit of their English.

In short, listening proficiency plays a critical role in the students' overall communicative competence, which initially requires that learners be able to discriminate functionally significant distinctions in their spoken English.

<Reference>

Avery, P. & Ehrlich, S. (1992). Teaching American English Pronunciation. New York: Oxford University Press.

Avery, P. (1985). Prosodic Domains In Foreigner Talk Discourse. In Susan M. Gass (ed), *Input In Second Language Acquisition*. Heinle & Heinle publishers.

Anderson, A. & Linch, T. (1988). Listening. Oxford: Oxford University Press.

Blau, E. K. (1990). The Effect of Syntax, Speed, and pauses on Listening Comprehension. *TESOL Quarterly* 24: 746-753.

Brown. G. (1990). Listening to Spoken English. London: Longman.

Brown, H. D. (1994). Teaching By Principles. New Jersey: Prentice Hall.

. (1994). Principles of Language Learning and Teaching. Prentice Hall.

Celce-Murcia, M. (ed.). (1991). Teaching English as a Second or Foreign Language. Mass: Heinle & Heinle

Celce-Murcia, M.; Brinton, D.M.; & Goodwin, J.M. (1997). *Teaching Pronunciation*. Cambridge: Cambridge Univ. Press.

Crystal, D.(1976). Prosodic Systems and Intonation in English: Cambridge: Cambridge Univ. Press.

Cruttenden, A. (1986). Intonation. Cambridge University Press.

Ellis, R. (1985). Understanding Second Language Acquisition. Oxford: Oxford University press.

Gass, S., & Madden, C. M. (eds.). (1985). Input in Second Language Acquisition. Mass: Heinle & Heinle.

Hayes, B. & Kaun, A (1994). The Role of Phonological Phrasing in Textsetting. University of California, Los Angeles.

Kenworthy, J. (1987) Teaching English Pronunciation. London: Longman

Kim, K. (1999). The Relevance of Syllable to Musical Note for English Pronunciation Teaching. Foreign Language Education 6:33-62. Korea Association Foreign Language Education.

Ladd, R. D. (1996). Intonation Phonology. Cambridge: Cambridge Univ. Press.

Ladefoged, P. (1993). A Course in Phonetics, 3rd ed. Fort Worth: Harcourt, Brace, Jovanovich.

Liberman, M. (1975). The Intonational System of English. PhD thesis, MIT.

Beisbier, B. (1994). Sound Great. Mass.: Heinle & Heinle

Nespor, M. & Vogel, I. (1989). Prosodic Phonology. Dordrecht: Foris.

Roach, P. (1983). English Phonetics and Phonology. A practical course: Cambridge Univ. Press.

Rost, M. (1990). Listening in language learning. London: Longman.

Selkirk, E. (1984b): Phonology and Syntax: The Relation between Sound and Structure. Cambridge, MA.: MIT Press.

Spencer, A. (1996). Phonology. Oxford: Blackwell.