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# An analysis of the problem-causing elements of intonation for Turkish teachers of English

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#### Abstract

Intonation is the most difficult area of foreign language learning; therefore, the elements of intonation must be specified first and then properly taught. The term intonation is a very fishy concept because its definition differs from linguist to linguist and from foreign language educator to applied linguists. The definitions given up to the present (Richards et al, 1992: 190; Richards and Schmidt, 2002: 272; Johnson and Johnson (1999: 176); Crystal (1987:169) are all defective because they show intonation just as a matter of pitch or voice changes in speech. It is, in fact, "the combination of pitch, stress and juncture with which an utterance is spoken (Frost, 1975: 238; Demirezen, 1986: 120). Apparently, it is this togetherness of the trio, namely, pitch, stress and juncture, which makes the learning of intonation the most difficult topic in foreign language education. According to the common belief, no amount of teaching or correction can properly teach the intonation (Fromkin et al, 2003). This presentation will claim that suprasegmental and segmental errors can be rehabilitated if the students and non-native teachers get a certain degree of awareness in intonation.

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Keywords: Fossilized intonation; audio-articulation model; stress; pitch; juncture; intonation rehabilitation.

## 1. Introduction

The field of analysis, called intonation, is a much confused and slippery term in foreign language education and teacher training. According to some experts, the learning problems of fossilized pronunciation and intonation errors are undoable (Fromkin et al, 2003) because the elements of intonation, namely the stress, pitch, and juncture, collectively, exert impacts in forms of negative transfers from L1, and make a league against L2 intonation learning strategies of the non-native learners. Therefore, they cannot be erased. This claim is not totally true. Even though the typological difficulties of L1 along with the cognitive learning styles, strategies, age, degree of awareness, motivation, self-monitoring skills of non-native teachers pact against the L2 teachers, there are some helpful

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generalizations to be applied on learning intonation, which will be proposed in this study, that would assist in learning the pronunciation and intonation of the target language.

### 2. The Elements of Intonation

The three elements of intonation, namely stress, pitch and juncture are very problematic to Turkish students and teachers, who have very strong fossilized intonation errors. A research made into this problem, handling randomly chosen 100 students of English Language Teacher Education Department at Hacettepe University in Ankara, Turkey and 30 Turkish English teachers with a teaching experience of 1 to 8 years indicates this fossilized intonation case is very a serious problem in a distressing level (Demirezen and Sonsaat, 2008g).

2.1. Firstly, stress, "as an articulatory term of description, is also known as accent, is the embodiment of the accumulation of energy imposed upon a sound on a sound group in the process of speech" (Demirezen, 1986:108). It is the loudest parts of words, phrases, clauses and sentences.

Functioning as **word stress** and **sentence stress**, there are four stress phonemes in English; the following represents generalizations on the stress pattern of English which can be practiced in teacher education classes:

# 2.2. /'/, the Primary Stress

It exists on every word, including each monosyllabic word. Téach, lóok, hóuse, cáll, séll, cáll, béll, dóll, búll, lóve, mask,

## 2.3. /\', the Secondary Stress

It generally exists in words, compound words, and verbs; words with more than two syllables and phrases:

More than two	syllables/Some Verbs	<b>Compound Words</b>	<b>Phrases</b>
âccídéntăl	ôutdáte	hótdôg	hôt dóg
sûppŏsítiŏn	rêădjûst	rédcôat	rêd coat
èlêctrónic	rêsŭrréct	gréenhôuse	grêen hóuse

# 2.4. //, Tertiary Stress

It exists in polysyllabic words:

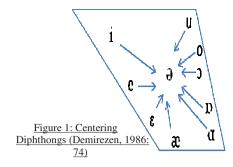
inâccéssible fündăméntal rèvŏlútiŏn rèsignátiŏn lìngûístics intrŏdúctŏry

#### 2.5. / \'/. the Weak Stress.

Weak stress comes into being in weakly stresses syllables, noun-verb conversions, and in phonemic reduction, due to mobility of stress in English:

Weakly stressed syllables		Noun X Verb	<b>Phonemic Decay</b>	
sêpărátiŏn	scándălŏus	súpport- sŭpport	Cánada / Cănadian	
ûnătténdĕd	Cánădă	súpply- sŭpply	mágic/ măgician	
chârăctĕrístĭc	égâlĭtárĭăn	cónvict- cŏnvict	fínance / fínancial	

It must be noted that, as seen in the examples of (4, weak stress), in English there is a mobility of stress, which makes the learning process very hard. With major and minor stress distinctions, the learning process of English gets to be very difficult for the learners who have syllable-timed mother tongue, like Turkish, Hungarian, Arabic, Spanish, French, and Japanese, or a tone-timed mother tongue, like Chinese, Vietnamese, and Siamese. Also, the mobility of stress alongside stress decay in which all vowels are reduced into the /\(\partial\)/Schwa phoneme, which is not existent in Turkish, as seen in figure 1 (Demirezen, 1986:74) makes the learning situation very difficult to the non-native learners, is a serious perception and articulation problem, as seen in figure 1:



magic-magician, japanese-japan	
idiotic-idiot	
able-ability	
suspect(n)-suspect(v), suspicion-suspicious	
photograph-photograpy	
hand-handful, care-careful	
observation-observe, orator-oration	

Due to vowel decay, stressed syllables are said to occur at roughly equal time intervals, with nonstressed syllables being 'stretched' or 'squashed' together (Jenkins, 2000:149). Such a case does not exist in Turkish and blocks their perception and production of sentences in native-like performances. Let alone English being a stress-timed language, it is this case of vowel reduction of almost all English vowels getting reduced to schwa phoneme through centering diphthongs that go unheeded in the attention of Turkish learners of English. In addition, it is this vowel reduction that blocks the way of the production of tonic stress in English by Turkish learners of English.

#### 2.6. Sentence Stress

Sentence stress includes the learning of phrases, clauses and sentences, which is an extremely complicated task for many non-native speaking teachers. The sentence stress variations in noun-adjective-adverbial clauses, and in simple, compound, complex, and compound-complex sentences, require special training of longer duration. According to Nunan (2003:53), in the following four utterances, the bold tapeface shows, which word is stressed as an analysis of sentence stress:

I think I know. (You may not think I know the answer; but I'm pretty sure I do.)

I *think* I know. (I'm not entirely sure, but I think I know the answer?

I think I know. (You may not know the answer, but I think  $\underline{I}$  do.

I think I *know*. (I am not unsure I am quite confident that I know the answer.)

It is obvious that stress is mobile in English, changing the meanings of sentences beyond recognition. It is this mobility of stress that gives very hard times to non-native speaking teachers to pick up the real intention of the native interlocuters.

# 3. The Study in Pitches

Secondly, the term pitch, also called, tone, "is the frequency of vibrations of human voice heard in highness and lowness of tones during the act of speech" (Demirezen, 1986:116). Applied and educational linguists are not in complete agreement on the precise number of pitches (tones) used by the native speakers of English. In this study, five types of pitches, which are all separate phonemes of the English language, are considered:

Linguists are not in complete agreement about the exact number of pitches that are used by the speakers of English. The following pitch patterns are **generalizations** that are mostly recognized in teaching English as a foreign language. The intentions seen in following example sentences may change from person to person:

3. 1. /231/, statement or declarative attitude:

a. 2I like 3milk1 b. 21 like 3tea2, 2cof3fee2, 2and 3milk1

c. 2I like 3tea1, 2but my wife 3hates it1 d. 3What you 3say2 2is the 3truth1

3. 2. /233/, question pitch forms (yes-no, interrogative):

a. 2Do you speak 3French3b. 2Are you 3readyy3

c. 2You are 3guilty3 d. 2You 3are single2 2aren't 3you3

3.4. /232/, incompleteness, doubt, or uncertainty pitch:

a. 2In 3brief2.... b. 2If you 3let me2.... c. 2It is 3doubtful3...

**d.** 2Since 320072... **e**. 2She is a nice 3girl2... f. 2You may 3think so2...

3. 5. . /223, or 332/ pitch for calling

a. 2Pe2ter3 (come here) b. 2Pe2ter3 (come here)

c. 3Pe2ter2 (Giving an admonition) d. 3Per2ter2 (Giving an admonition)

3.6 . /234/, the shouting pitch

a. 2Ste3phen4b. 2I 3hate you4c. 2It's a 3pack of lies4d. 2Sh3ot up4

3. 7. /221/ the neutral pitch:

a. 2That's 2it1
b. 2I 2don't know1
c. 2That's 2your problem1
d. 2That's 2it1

## 4. The study in Junctures

The term juncture is also defined as the pause we make during the speech incident. Even though junctures carry **conversational functions**, their importance goes mostly unheeded in the spoken language. They indicate the fact that sound barriers in consonants, vowel, semi-vowels, and approximants are used to demarcate the beginning and ending of words, phrases, and sentences.

Juncture is a sound quality signalling a pause or pauses. It is generally defined as "perceptible differences in word segmentation" (Celce-Murcia, et al: 241). Linguistically speaking, juncture has direct connections to stress and pitch patterns, which end in certain characteristic ways so as to achieve phrasing that is managed by junctures.

# 4.1. Juncture Studies Being Neglected

In many phonetics and phonology books today, the study and analysis of junctures do not take place. Harris (1951) introduced the term juncture to replace 'syllabification' features to signal the differences between two such phrases like *a name* and *an aim* or *I scream* and *ice-cream* in order to account for such cases. In addition, Trubetskoi (1958) holds that pauses are always possible in speech, and phonetic peculiarities with delimitative and demarcative functions serve to replace for these pauses. Yet Haugen (1972) insisted that juncture cannot account for all such segmentations. Bloomfield (1933) indicates juncture as a difference in stress.

As stated before, in many phonetics and phonology books today, the study and analysis of junctures do not take place. According to Pickering (2002), the location of pauses carries crucial function in intonation

An explanation for this missing case is given by Pei (1966:132), since no fusion takes place across the boundaries of these patterns, juncture belongs to rather to the level of phonology, for the prosodic features of stress, pitch, and duration automatically take care of it. Thus, the sacrifice of juncture to supremacy of pitch, stress, and vowel length, it poses a handicap for the non-native learners. The failure or segmentation their speech into word groups results not only in problems with nuclear placement, but also a lack of pause which, for the listener creates a false sense of speed (Nash, 1969).

Junctures refer to pauses or pausing while speaking. Applied and educational linguists are not in complete agreement on the precise number of pitches (tones) used by the native speakers of English. In this research, five juncture phonemes are accepted in English, but some other linguists claim that there are more than five junctures in English.

The following juncture patterns, being the ingredients of suprasegmental phonology, give useful generalizations of the English language:

## 4.2. Open and close juncture

## a. Open juncture (+): Close Juncture:

It takes place in phrases. It takes place in compound words.

Black bird blackbird

(I saw a black bird.) (I saw a blackbird.) Black board blackboard

I need a black board. (I need a blackboard.)

Light house lighthouse

(Mary works in a light house.) (Mary works in a lighthouse.)

Green house greenhouse

(Jane lives in a green house) (Jane lives in a greenhouse.)

Hot dog hotdog (I ate a big hot dog.) (I ate a big hotdog.)

4.3. /\/, falling juncture: ending the utterance (Falling Terminal Juncture)

a. I like coffee↓
b. I like apples, pears, and bananas↓
d. What you say is the truth↓

4.4. /\u00e1/, rising juncture signals enquiring attitude (Rising Terminal Juncture)

**a**. Do you speak French↑ **b.** Are you happy↑

4.5. /√ falling-rising juncture signals doubt, uncertainty, reservation

a. I'm not SURE \↑
b. It's DOUBTFUL\↑
c. She COULD\↑
d. It's UNBELIVABLE\↑

4.6. //\forall, emphatic, important, impatient possibly sarcastic attitudes

a. It DEPENDS/↓ b. REALLY/↓ c. Up to YOU /↓ c. How NICE/↓

4.7.  $\rightarrow$ , pause juncture indicates incompleteness and expectation; one feels as if the utterance is not finished yet (the sustained terminal juncture):

a. In brief→
 b. If you let me→
 c. It is doubtful→
 d. Since 2007→
 e. She is a nice girl→
 f. You may think so→

Most of these junctures are agreeable with the punctuation marks, but still they fall short in conveying the features of junctures properly. As it is seen, studies on L2 intonation are extremely complicated, requiring special practices. Adequate drilling and practice in these L2 intonation generalizations develop intonation memory. Learners must be always on the alert because the native tongues of the learners work contrary to the target language acquisition exerting negative pressures and transfers in form of mother tongue interferences. Negative transfers result in a "foreign accent, which typifies adult language learning" (Hudson, 2000: 170). If possible, residence in the target language country will be a good advantage for the non-native speaking teachers.

#### 5. Conclusion

The intonational specifics of the English language, which are stress, pitch, and juncture, is problem-causing ingredients of English for Turkish teachers of English. If not studied properly, they inevitably obstruct the foreign language learning skills of all non-native teachers by blinding their awareness of L1 learning skills on the tonic syllables in relation to stress, pitch, and juncture in connected discourse. More importantly, the absence of studies and drilling on junctures in course books become a great handicap on the internalization of target language intonation by the non-native teachers of English. The absence of word-grouping is likely to result in non-fluent speech, with pauses occurring in unnatural places to facilitate the solving of linguistic problems rather then to serve the purpose of signalling information structure (Jenkins, 2000:45).

Obviously, an adequate analysis and practice of English intonation in relation to stress, pitch, and especially to juncture is needed in teacher training curricula of Turkish teacher education programs in Turkey. Unfortunately, there are no courses as such. There are no good course books to be used in such courses, either. Martin Hewings book titled English Pronunciation in use (2007) is recommendable. In addition such electronic sites can be of great help. In addition, various electronic and computer mediated systems have been developed to make the non-native teachers autonomous learners, including WinPitch LTL I and II by Pitch Instruments Inc. (http://www.win-

pitch.com); BetterAccent Tutor (http://www.betteraccent.com/) provides audio-visual feedback of intonation, stress and rhythm in American English; the public domain software Praat (available from http://www.praat.org) can be used for the grammatical functions of intonation in English with the aid of visual displays.

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