

**UCLA**

**UCLA Electronic Theses and Dissertations**

**Title**

Acquisition of Second Language Prosody and the Role of Prosody in Discourse: A Study of English Speakers' Korean and Korean Speakers' English

**Permalink**

<https://escholarship.org/uc/item/0mz329t3>

**Author**

Lee, Heeju

**Publication Date**

2018

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA

Los Angeles

Acquisition of Second Language Prosody and the Role of Prosody in Discourse:

A Study of English Speakers' Korean and Korean Speakers' English

A dissertation submitted in partial satisfaction of the  
requirements for the degree Doctor of Philosophy  
in Asian Languages and Cultures

by

Heeju Lee

2018



© Copyright by

Heeju Lee

2018

## ABSTRACT OF THE DISSERTATION

Acquisition of Second Language Prosody and the Role of Prosody in Discourse:

A Study of English Speakers' Korean and Korean Speakers' English

by

Heeju Lee

Doctor of Philosophy in Asian Languages and Cultures

University of California, Los Angeles, 2018

Professor Sun-Ah Jun, Co-Chair

Professor Sung-Ock Shin Sohn, Co-Chair

This dissertation investigates the acquisition of second language (L2) prosody (e.g., intonation, stress, rhythm) in native English speakers' Korean and native Korean speakers' English based on the Autosegmental-Metrical (AM) framework. Specifically, by comparing prosodic characteristics of the first language (L1) and L2, this study examines how L2 speakers negotiate meanings in discourse (e.g., signal turn-taking and convey various pragmatic meanings) through intonation and co-occurring grammatical resources, and why the speech of L2 speakers sounds foreign. There is a lack of understanding of the role of L2 prosody at the discourse level. Considerable research focuses on L2 prosody in made-up sentences, failing to explain meaning negotiation conveyed through prosody. Moreover, few studies have used appropriate prosodic frameworks when describing prosodic errors of L2 speech.

In this dissertation, Korean L2 data were collected from 12 oral proficiency interviews (OPI) between Korean L2 interviewees and a native Korean interviewer; four interviews with native Korean speakers served as controls. English L2 data were collected from 12 oral proficiency tests designed for international teaching assistants at the University of California, Los Angeles; three presentations by native English speakers served as controls. The data were labeled using the Korean TOnes and Break Indices (K-ToBI, Jun 1993, 2000, 2005) and Mainstream American English (MAE) ToBI (Pierrehumbert, 1980; Beckman & Pierrehumbert, 1986; Beckman et al. 2005) transcription systems. Analysis revealed that L2 speakers at different proficiency levels (i.e., intermediate and advanced) were able to use prosody to signal turn continuations but more advanced speakers were better at using prosody to convey various pragmatic meanings appropriate to the conversational context. However, the foreign accents or error types in prosody were frequent in L2 production at both proficiency levels, suggesting later acquisition of these features.

This study introduces how the AM framework can be used to analyze L2 prosody in discourse. The study further suggests crosslinguistic similarities in the acquisition order between prosody associated with pragmatic meanings and prosody associated with nonpragmatic meanings.

The dissertation of Heeju Lee is approved.

Shoichi Iwasaki

Hongyin Tao

Sun-Ah Jun, Committee Co-Chair

Sung-Ock Shin Sohn, Committee Co-Chair

University of California, Los Angeles

2018

To my family

## TABLE OF CONTENTS

LIST OF TABLES .....	ix
LIST OF FIGURES .....	x
ACKNOWLEDGMENTS .....	xiii
VITA .....	xv
CHAPTER 1 INTRODUCTION .....	1
1.1 Literature review .....	1
1.2 Research questions .....	8
1.3 Dissertation overview .....	8
CHAPTER 2 DATA AND METHODOLOGY .....	10
2.1 Data .....	10
2.1.1 Korean L2 .....	10
2.1.2 English L2 .....	13
2.2 Methodology .....	16
2.2.1 Autosegmental-Metrical model of intonational phonology .....	17
2.2.2 Korean intonation and Korean Tones and Break Indices (K-ToBI) .....	18
2.2.3 Mainstream American English (MAE) intonation and MAE-ToBI .....	21
CHAPTER 3 SECOND LANGUAGE PROSODY AND PRAGMATICS: THE CASES OF <i>(NU)NTEY</i> AND <i>KETUN</i> .....	23
3.1 Introduction .....	23
3.2 Previous studies on <i>(nu)ntey</i> and <i>ketun</i> .....	25
3.2.1 <i>(Nu)ntey</i> .....	25
3.2.2 <i>Ketun</i> .....	30
3.3 <i>(Nu)ntey</i> in second language discourse .....	35
3.3.1 Backgrounder with H% and HL% .....	37
3.3.1.1 In responses .....	38
3.3.1.2 In requests .....	47

3.3.2 Tone mitigator with H% and LH%.....	57
3.4 <i>Ketun</i> in second language discourse.....	68
3.4.1 As a parenthetical.....	69
3.4.2 In a thesis statement.....	77
3.5 Conclusion and discussion.....	82
CHAPTER 4 SECOND LANGUAGE PROSODY AND PARENTHETICALS.....	85
4.1 Introduction.....	85
4.2 Previous studies.....	87
4.2.1 Turn-taking practices and prosody.....	87
4.2.2 ToBI labeling.....	90
4.3 Analysis.....	92
4.3.1 Native speakers.....	92
4.3.2 Second language speakers.....	100
4.3.3 Phonetic features (duration per syllable).....	118
4.4 Discussion.....	119
4.5 Teaching implications.....	121
4.6 Conclusions.....	124
CHAPTER 5 ACQUISITION OF SECOND LANGUAGE PHONETICS AND PHONOLOGY: WHAT MAKES SECOND LANGUAGE SPEAKERS' SPEECH SOUND FOREIGN?.....	126
5.1 Introduction.....	126
5.2 Korean L2.....	128
5.2.1 AP-initial tone assignment (Type 1).....	130
5.2.1.1 AP-initial H-segment mapping ('Hm').....	132
5.2.1.2 AP-initial L-segment mapping ('Lm').....	141
5.2.2 AP tonal patterns (Type 2).....	146
5.2.2.1 English pitch accents + Korean boundary tones.....	148
5.2.2.2 English pitch accents + Korean second H.....	150
5.2.2.3 Korean AP-initial tones + English pitch accents.....	154
5.2.3 Conclusion and discussion of 5.2.....	155

5.3 English L2 .....	158
5.3.1 Types of pitch accent assignments.....	159
5.3.2 Location of pitch accent assignments .....	165
5.3.2.1 Frequent assignment of pitch accents.....	165
5.3.2.2 Pitch accent assignments on function verbs .....	167
5.3.2.3 Pitch accent assignment on emphatic words .....	171
5.3.3 Conclusion and discussion of 5.3.....	175
 CHAPTER 6 CONCLUSION .....	 177
6.1 Summary .....	177
6.2 Implications of the study .....	179
 APPENDIX A LANGUAGE BACKGROUND INFORMATION SHEET .....	 182
APPENDIX B ABBREVIATIONS USED IN THE KOREAN GLOSS .....	184
REFERENCES .....	185



## LIST OF TABLES

Table 2.1 Korean L2 speakers' language background information .....	12
Table 2.2 English L2 speakers' gender, score, and major .....	16
Table 3.1 Boundary tones and syntactic positions of <i>(nu)ntey</i> in two uses .....	35
Table 3.2 Frequency of boundary tones realized on <i>(nu)ntey</i> across speakers at intermediate and advanced levels in two contexts .....	36
Table 3.3 Distribution of boundary tones realized on <i>ketun</i> across speakers at intermediate and advanced levels.....	68
Table 3.4 Frequency of boundary tones realized on <i>ketun</i> across speakers at intermediate and advanced levels in two contexts .....	69
Table 4.1 Break Indices and their meaning in Korean and English.....	92
Table 4.2 Duration per syllable of IPs at pre-insert, post-insert, and transition zone.....	118
Table 5.1 Number of APs for each category per speaker .....	128
Table 5.2 Proportion of correct and incorrect production out of total APs by proficiency level .....	129
Table 5.3 Distribution of two error types out of total APs by proficiency levels.....	129
Table 5.4 Lenis, tense, and aspirated consonants across places of articulation in Korean.....	130
Table 5.5 Voiced and voiceless consonants across places of articulation in English.....	131
Table 5.6 Number and percentage of Hm and Lm out of Type 1 errors.....	132
Table 5.7 Number and percentage of Hm and Lm out of L-initial APs and H-initial APs .....	132
Table 5.8 Pitch accent assignment in keywords in three groups .....	159

## LIST OF FIGURES

Figure 2.1 Syllabus format.....	14
Figure 2.2 Intonation model of Seoul Korean .....	19
Figure 2.3 Nine boundary tones in Korean.....	21
Figure 2.4 Intonation model of English .....	22
Figure 3.1 Relationship between pragmatic meanings and the combination of suffixes and boundary tones .....	24
Figure 3.2 Pitch contour of HL% on <i>-nuntey</i> .....	40
Figure 3.3 Pitch contour of HL% on <i>-untey</i> .....	42
Figure 3.4 Pitch contour of HL% on <i>-untey</i> .....	44
Figure 3.5 Pitch contour of H% on <i>nuntey-yo</i> .....	47
Figure 3.6 Pitch contour of HL% on <i>-untey</i> .....	52
Figure 3.7 Pitch contour of LHL% on <i>-untey</i> .....	56
Figure 3.8 Pitch contour of LH% on <i>-nuntey</i> .....	60
Figure 3.9 Pitch contour of H% on <i>-nuntey</i> .....	63
Figure 3.10 Pitch contour of LH% on <i>-nuntey</i> .....	66
Figure 3.11 Pitch contour of H% on <i>-ketun</i> .....	71
Figure 3.12 Pitch contour of H% on <i>-ketun</i> .....	73
Figure 3.13 Pitch contour of H% on <i>-ketun</i> .....	77
Figure 3.14 Pitch contour of H% on <i>-ketun</i> .....	79
Figure 3.15 Pitch contour of H% on <i>-ketun</i> .....	81
Figure 3.16 Relationship between pragmatic meanings and the combination of <i>ketun</i> and boundary tones .....	83
Figure 4.1 Prosodic grouping in Example 4.1 .....	86
Figure 4.2 Transition zone in Example 4.3.....	95
Figure 4.3 Prosody-syntax mismatch in Example 4.3 .....	96
Figure 4.4 Transition zone in Example 4.4 (lines 2-3) .....	97
Figure 4.5 Prosody-syntax mismatch in Example 4.4 (lines 2-3).....	98
Figure 4.6 Transition zone in Example 4.4 (lines 4-5) .....	99
Figure 4.7 Prosody-syntax mismatch in Example 4.4 (lines 4-5).....	99

Figure 4.8 Transition zone in Example 4.5.....	102
Figure 4.9 Prosody-syntax mismatch in Example 4.5 .....	103
Figure 4.10 Transition zone in Example 4.6.....	105
Figure 4.11 Prosody-syntax mismatch in Example 4.6 .....	105
Figure 4.12 Transition zone in Example 4.7 (lines 7-8) .....	109
Figure 4.13 Transition zone in Example 4.7 (lines 9-10) .....	110
Figure 4.14 Prosody-syntax mismatches in Example 4.7.....	110
Figure 4.15 Transition zone in Example 4.8.....	112
Figure 4.16 Prosody-syntax mismatches in Example 4.8.....	113
Figure 4.17 Transition zone in Example 4.9.....	114
Figure 4.18 Prosody-syntax mismatches in Example 4.9.....	114
Figure 4.19 Transition zone in Example 4.10 (lines 1-3) .....	116
Figure 4.20 Prosody-syntax mismatches in Example 4.10 (lines 1-3) .....	116
Figure 4.21 Transition zone in Example 4.10 (lines 4-6) .....	117
Figure 4.22 Prosody-syntax mismatches in Example 4.10 (lines 4-6) .....	117
Figure 4.23 Index card examples for a role-play activity .....	123
Figure 5.1 Hm on /tʃ/ and !H% on topic particle <i>nun</i> .....	136
Figure 5.2 Hm on /k/ and /m/ and HL% on topic particle <i>un</i> .....	138
Figure 5.3 Hm on mispronounced lenis /tʃ/ and /p/ .....	140
Figure 5.4 Lm on /s/, /h/, and /s/ and HL% on topic particles <i>un</i> .....	142
Figure 5.5 Lm on /tʃ <sup>h</sup> / in the initial syllable <i>chak</i> .....	144
Figure 5.6 L*H% contour of <i>yenkwusil</i> .....	149
Figure 5.7 L* and +H in <i>tongney-mata</i> .....	152
Figure 5.8 H* and +H in <i>wenkwangtay-eyse</i> .....	153
Figure 5.9 Pitch contour of <i>wuncensa-ka</i> .....	155
Figure 5.10 Number of Type 1 and Type 2 errors in intermediate (square) and advanced (triangle) speakers' data .....	156
Figure 5.11 L+H* on contrasted information .....	160
Figure 5.12 L+H* and H* on contrasted information .....	161
Figure 5.13 L* on contrasted information .....	162
Figure 5.14 NS2's production.....	162

Figure 5.15 L* on <i>Thursday</i> produced by P5 .....	163
Figure 5.16 L* on <i>Thursday</i> produced by F3 .....	164
Figure 5.17 L* on <i>Thursday</i> produced by F3 .....	164
Figure 5.18 NS1's production.....	165
Figure 5.19 Production by F4 .....	166
Figure 5.20 Production by P6 .....	167
Figure 5.21 Production by P5 .....	168
Figure 5.22 Production by P5 .....	169
Figure 5.23 Production by P5 .....	170
Figure 5.24 NS3's production.....	171
Figure 5.25 NS3's production of <i>ON TIME</i> .....	172
Figure 5.26 NS1's production of <i>ON TIME</i> .....	172
Figure 5.27 Production of <i>ON TIME</i> by P5 .....	173
Figure 5.28 Production of <i>ON TIME</i> by F5 .....	174
Figure 5.29 Production of <i>ON TIME</i> by P6 .....	174

## ACKNOWLEDGMENTS

This dissertation would not have been possible without many people. I gratefully acknowledge the participants in this study. I would like to express my deep and sincere gratitude to all my committee members. I am greatly indebted to Professor Sung-Ock Sohn for her warmest encouragement and guidance throughout my graduate years. She has provided me with insightful comments on my data and drafts of this project with her expertise in Korean grammar and linguistics. She has also given me valuable opportunities to teach various Korean language and culture courses. She has been a wonderful mentor who taught me how to balance my roles as a wife and mother with the demands of my graduate career. I will be eternally grateful for everything she has done for me.

My deepest gratitude also goes to Professor Sun-Ah Jun. She is an exceptional scholar, passionate teacher and supportive mentor. I thank her for her unwavering support academically and personally. I had many appointments with her that lasted for more than two hours. Even when I brought her some raw data without any intonation labeling, she would listen patiently to my data over and over again; together, we always drew compelling insights. Without her continuous support, I would not have been able to complete this dissertation. I also thank her for how she considered my data seriously and introduced my data in many of her talks.

I would like to express my appreciation to Professor Hongyin Tao for his encouragement and insightful and prompt feedback on many of my papers including my dissertation drafts. When I was stuck with my writing, he counseled me on how to deal with such challenges. I especially thank him for helping me develop one of my term papers into a journal article. I learned a lot from him about how to prepare, revise and publish an academic article. I am

grateful for Professor Shoichi Iwasaki's kindness, warmth, and support. He always kept me updated with his visits to UCLA and his new articles and interesting courses. His thoughtful guidance on my dissertation proposal helped me craft a stronger conclusion.

I extend my gratitude to my teachers at Sogang University. I thank to Professor Sungbom Lee for his constant encouragement through emails and whenever I visited his office in Korea. I thank Professor Isaiah WonHo Yoo for his continuous belief in my potential and Professor Yo-An Lee for his training in conference presentations and article publishing.

My warm thanks also go to my friends, colleagues, and teaching mentors. Their friendship and emotional support has sustained me through the ups and downs of my graduate years. I would like to thank Hyojeong Kim, Hyung Ryeol Kim, Myounghee Moon, Bokyoung Mun, Hyeri Kim, Soyeon Kim, Don Lee, Jihyeon Cha, Jee Hyun Lee, Jae Eun Im, Minhee Oh, Jae-Eun Yoon, Seonkyung Jeon, Jinhee Lee, Sangmee Oh, Jongwoo Park, Seoyun Shannon Shin, Matt Lauer, Seunggon Jeong, Wei Wang, Haiping Wu, Wakako Suzuki, Ayano Takeuchi, Grigor Ketenchian, Joon Hur, Jaehyun Jo, Daphne Lee, Danjie Su, Tommy Tran, Helen Wan, and all other dear friends at UCLA.

Finally, I owe my deepest and heartfelt gratitude to my parents for their love, support and belief in me. I would like to thank my parents-in-law for taking care of my twins for nine months so that I could have time to write my dissertation chapters. I am also grateful to my sister Yoonju who patiently listened to my worries about my future and helped me get over hard times during my pregnancy in the dissertation year. Last but not least, I must thank my loving husband, Juneyoung, for always being there for me with his endless love and support throughout my graduate life at UCLA, and my beloved twins Andrew and Olivia for coming to me.

## VITA

- 2007 B.A., *summa cum laude* in English Language and Literature  
Sogang University  
Seoul, Korea
- 2007 Certificate of English Teacher  
Sogang University  
Seoul, Korea
- 2009 M.A., with Highest Distinction in English Linguistics  
Sogang University  
Seoul, Korea
- 2011 Teaching Assistant  
Department of Asian Languages and Cultures  
University of California, Los Angeles
- 2011 M.A., Applied Linguistics  
University of California, Los Angeles
- 2012-2016 Teaching Fellow, Teaching Associate  
Department of Asian Languages and Cultures  
University of California, Los Angeles
- 2013 Certificate in Teaching of English as a Second/Foreign Language  
University of California, Los Angeles
- 2013-2014 Test of Oral Proficiency Exam Rater  
Office of Instructional Development  
University of California, Los Angeles
- 2014-present Oral Proficiency Tester  
American Council on the Teaching of Foreign Languages

## SELECTED PRESENTATIONS

Lee, H. (July, 2008). *Korean college students' answering negative yes-no questions*. Paper presented at the Korea Association of Teachers of English International Conference, Bukyung University, Busan, Korea.

Lee, H. (January, 2013). *A corpus-based analysis of the disaffiliative uses of mwusun 'what' in spoken Korean*. Paper presented at the American Association for Corpus Linguistics, San Diego State University.

Lee, H. (June, 2014). *Native English speakers' use of Korean intonation in conveying pragmatic meaning in the oral proficiency interview*. Paper presented at the American Association of Teachers of Korean (selected as a TOP paper), Boston University.

Lee, H., Su, D., & Tao, H. (October, 2014). *A crosslinguistic study of some extended uses of 'what'-based interrogative expressions in Chinese, English, and Korean*. Paper presented at the American Pragmatics Association, UCLA.

Lee, H., & Sohn, S.-O. (February, 2015). *Prosodic units as a measure in defining oral fluency and lexical competence in discourse*. Paper presented at the Italian Association for Applied Linguistics, University of Salento, Italy.

Lee, H. (October, 2015). *Prosody-syntax mismatches for holding turns*. Paper presented at the Pronunciation in Second Language Learning and Teaching, Texas A&M University-Commerce.

Lee, H., & Jun, S.-A. (December, 2016). *Types of errors in English prosody made by native Korean speakers*. Paper presented at the Acoustical Society of America (ASA), Honolulu, Hawaii.

Lee, H. (July, 2017). *Acquisition of Korean second language prosody: what makes L2 speakers' talk sound foreign?* Paper presented at the American Association of Teachers of Korean (AATK), University of Southern California.

## PUBLICATIONS

Lee, H. (2008). Conversation analysis of Korean college students' answers to English negative yes-no questions. Unpublished M.A. Thesis, Sogang University, Seoul, Korea.

Lee, H. (2011). The effects of instruction on second language pronunciation: A case study of a Japanese learner of Korean. Unpublished M.A. Thesis, UCLA.

Lee, H. (2017). Effects of fine-tuning instruction on second language pronunciation, *The Korean Language in America*, 21(1), 89-119.

Lee, H., Su, D., & Tao, H. (2017). A crosslinguistic study of some extended uses of *what*-based interrogative expressions in Chinese, English, and Korean, *Chinese Language and Discourse*, 8(2), 137-174.



# CHAPTER 1

## INTRODUCTION

### 1.1 Literature review

Prosody includes but is not limited to intonation, stress, pauses, loudness, tempo, prominence, voice quality, and rhythm. Prosody plays an important role in achieving communicative goals and conveying various pragmatic meanings in conversation (Barth-Weingarten, Reber, & Selting, 2010; Couper-Kuhlen & Selting, 1996). According to Selting (2010), prosody is a “(co)constitutive” rather than a redundant or optional element in spoken language because speakers mandatorily deploy prosody to convey particular messages in a similar way to lexical or syntactic choice. Moreover, prosody is the decisive factor in achieving a particular action (Selting, 2010). That is, an utterance can have the same syntactic features or lexical items but can express a completely different action and intention depending on prosodic manipulation.

Pierrehumbert and Hirschberg’s (1990) study is a pioneering work that examined systematically the meaning of “tune” or intonational contours in English discourse. The tune is composed of three components: pitch accents ( $L^*$ ,  $H^*$ ), phrase accents ( $L-$ ,  $H-$ ), and boundary tones ( $L\%$ ,  $H\%$ ).<sup>1</sup> Pierrehumbert and Hirschberg viewed tune meaning as compositionally constructed from these different components. For example, pitch accents signal the newness or sharedness of information of accented words:  $H^*$  signals the speaker’s addition of new information and  $L^*$  signals the absence of newness. While  $H^*$  signals that the speaker delivers new information to the hearer,  $L^*$  reveals that the speaker expects to obtain the information from

---

<sup>1</sup> In English, pitch accents are assigned to the stressed syllable of a prominent word, and

the hearer in information-seeking questions or shows the speaker's assumption that the word with L\* is shared with the hearer (i.e., conveys old information). Thus, the choice of pitch accent type is determined by the speaker's assumption of shared beliefs or knowledge between themselves and the hearer. The speaker uses H\* to convey what the speaker assumes is new information for the hearer. L\* is used when the speaker believes that the knowledge or belief is already shared between the speaker and the hearer. A rising (L+H) pitch accent (i.e., L+H\*, L\*+H) is used when the speaker intends to evoke a scale so that the pitch accented item creates the existence of alternatives to the accented item. For example, L+H\* is commonly used to mark correction or contrast. Phrase accents convey the degree of relatedness to the current and surrounding Intermediate Phrases, an intermediate prosodic unit where phrase accents are realized. H- signals that the current phrase is semantically related to the subsequent phrase, while L- signals the separation between the two phrases. Boundary tones signal the relationship between Intonation Phrases (IP), the biggest prosodic unit where boundary tones are realized (prosodic units in English will be discussed in more detail in Chapter 2). H% indicates that the current IP is semantically related to the following IP, but L% does not indicate such a relationship. The authors have emphasized that the tune and meaning is a one-to-many relationship, suggesting that tune meaning is not intrinsic itself but is interpreted relevant to the context in which the tune is delivered.

Unlike English, Korean does not have pitch accent or phrase accent and the discourse meaning of an utterance is only conveyed by the boundary tone of an Intonational Phrase (Jun (1993, 2000). She proposed nine IP boundary tones, the largest inventory across languages studied so far. Park (2003) examined the meaning of boundary tones associated with various morpho-syntactic Korean forms, based on Pierrehumbert and Hirschberg's notion of the

compositionality in interpreting the meaning of pitch contours. In her extensive analysis of naturally occurring spoken data collected from conversation among members of a small church group, she categorized the eight most frequent boundary tones into monotonals (L%, H%), bitonals (LH%, HL%), and multitonals (LHL%, HLH%, LHLH%, HLHL%). The H and L tones have three different domains of meaning according to three types of communicative goals (informational, affective, and structural). In its informational use, H signals the speaker's low degree of certainty about the content of the utterance, while L indicates of the tokens of the speaker's high degree of certainty. In her study, approximately 79% of H% were used in interrogatives and 91% of the tokens of L% were used in non-interrogatives. In its affective use, H signals the speaker's high degree of interest or openness toward the addressee, and L signals a lower degree of openness or interest. The affective use is relevant to the speaker's various stances (e.g., (dis)agreeing). The affective H elicits the interlocutor's involvement in the conversation while the affective L does not elicit such involvement. In its structural use, H signals the connectedness of the current and the following utterances, while L does not signal such a connection. Her analysis showed different compositional meanings of bitonals and multitonals determined by the combination of individual meaning of tonal units (H and L) in Korean conversations.

Sohn and Park (2002) have examined the interplay of a particular boundary tone and grammatical suffixes in Korean. They examined boundary tones on the final suffix *-ketun*. By analyzing 240 minutes of conversation among Bible study group members, they found that the H% realized on the final suffix *-ketun*, which is the most frequently realized tone, had two interactional functions: 1) it signaled the current speaker's turn continuity, and, conversely, 2) it invited the interlocutor to take a turn and expand the sequence of conversation.

In this dissertation, the relationship between boundary tones and grammatical suffixes will be examined based on data from English speaking Korean L2 language learners. The notion of compositionality is employed when analyzing bitonals or multitonals.

Only a few studies have analyzed how L2 speakers use prosody for such pragmatic purposes, and most have concentrated on prosody in an English as a Second Language (ESL) setting. Using Pierrehumbert and Hirschberg's (1990) intonational framework, Wennerstrom (1994) examined the intonation of native English speakers and non-native speakers of English in "reading a paragraph" and "describing a picture" tasks. She measured pitch and intensity produced on specific words and tested the statistical differences between the two values produced between native English speakers and non-native English speakers. She found that native speakers used intonation in a "salient and predictable" manner to contrast ideas, list items, or mark new/old information; in contrast, non-native speakers typically could not use intonation to convey such meanings. For example, whereas native speakers indexed new information with a high pitch accent significantly higher than the pitch accent used for old information, non-native speakers' high pitch accents were not significantly higher for new information than old information.

Pickering (2009) used Brazil's (1980, 1997) discourse intonation framework for analyzing learners' prosody. She found that non-native English speakers negotiated meaning with tone, key, and stress by following the same set of prosodic rules as English native speakers. She examined English learners' discourse in the context of a "spot the difference" information gap task in which paired learners had to find five differences between two similar pictures by describing their own picture without showing the pictures to each other. The learners 1) were sensitive to a misplaced nuclear stress and considered it to be problematic and 2) used rising and

falling tones for different purposes. They indexed topic initiation with a rising tone and topic termination with a falling tone and 3) were able to show surprise or initiate repair with a high pitch in response to the other learners' grammatical or lexical errors. On the other hand, in another study, Pickering (2001) found that non-native speakers of English were not able to use tones fluently to interact with native speakers during classroom presentations. By comparing tone choices used by Chinese international teaching assistants (ITAs) and native English speaker teaching assistants (NS TAs) in classroom discourse, she showed that the ITAs' tone choice hindered effective communication with students. The ITAs did not use a high tone as frequently as appropriate, making their speech more directive and less interactive. In addition, the ITAs' repetitive use of falling tones at the end of each of short and choppy utterances not only made their presentation sound extremely peremptory, but also ruined the overall organization of the speech.

Slater, Levis, and Muller (2015) examined ITAs' classroom discourse and focused on their use of parenthetical constructions and accompanying prosody in English L2. Parentheticals refer to remarks that provide supplementary information relevant to the main point of the talk. In classroom discourse, parentheticals were used to 1) check for students' understanding (e.g., It's a weak acid, right?) or comment on the classroom context (e.g., We'll begin again with oh, I didn't change the slide, um), 2) promote interpersonal relationships between the teacher and students (e.g., I gave you that point just because I know that's what you guys like), and 3) connect classroom content to previously covered information or to outside classroom content (e.g., there's a whole sort of lifestyle that seems to go along with it. I don't know any of you all have been paying attention to the whole Gwyneth Paltrow Chris Martin breakup, but a lot of what is getting talked about is her diet in terms of the reasons for their breaking up). The authors found

that both NTAs and ITAs used parentheticals but that ITAs used parentheticals for more limited purposes ((1) and (3)) and with less varied prosodic features (lower volume). It was emphasized that ITAs needed to be taught various prosodic cues (lower pitch, quieter voice) to effectively mark parenthetical constructions.

The majority of L2 studies on prosody focuses more on L2 prosody teaching based on a general agreement on the importance of teaching prosody at the discourse level in language classrooms. Chun (1988) argues that teaching prosody is more important than teaching grammar or syntax because prosody is the major element used for understanding one another's messages in actual communicative settings. For example, the question "would you close the door?" can be uttered with an imperative falling intonation by parents to scold a child; in contrast, the same phrase can be said with a polite rising intonation to a stranger. Thus, even with the same syntax, the meaning changes depending on intonation. Celce-Murcia, Brinton, and Goodwin (1996) emphasized the importance of teaching suprasegmentals or prosody especially within discourse based on an accurate knowledge of the English sound system, and suggested various communicative teaching techniques for learning prosody. In the first chapter of their book, they explained the consonant and vowel systems in English, and in the second chapter, offered specific teaching guidelines for teaching prosodic features such as stress, rhythm, prominence, and intonation. For each prosodic feature, they provided linguistic information about the feature, pedagogical techniques and tips, and controlled and communicative classroom exercises.

Baker (2011), from a more practical perspective, investigated 1) the impact of L2 prosody research on actual language teaching contexts in ESL classrooms; 2) teachers' beliefs or thoughts on pronunciation teaching; and 3) teachers' needs for future research on pronunciation instruction. After interviewing six ESL teachers from different instructional levels in various

language programs, she found that research on L2 prosody helped teachers learn how to improve or modify their pronunciation instruction. The teachers reported that not only academic workshops or journal articles but also graduate courses they took previously significantly affected their current pronunciation teaching. Second, the author found that teachers prioritized different pronunciation elements over others according to their own teaching principles, which were influenced by the education they received. For example, some teachers prioritized word stress or rhythm because they were taught that suprasegmentals in their graduate program were crucial in communication; however, other teachers focused on consonant pronunciation. One shared opinion was that the teachers were uncertain how to teach L2 pronunciation although they agreed upon its pedagogical importance. Therefore, they asked for future research to be conducted that would focus on actual teaching and learning practices, such as anecdotal accounts that they could utilize in the classroom.

In sum, as shown in the previous literature, a growing number of studies have drawn attention to L2 prosody and the need to teach prosody at the discourse level. However, the field lacks studies on L2 prosody use for pragmatic purposes and in languages other than English L2. Therefore, this dissertation seeks to examine the following: whether and how L2 speakers use prosody at the discourse level for interactional purposes; what kinds of pragmatic goals L2 speakers achieve in interaction; and which prosodic features make L2 speakers' talk sound non-native-like. Ultimately, this project attempts to understand the acquisition of L2 prosody in order to be used in language teaching by examining English L2 and Korean L2 authentic interactional data in oral proficiency test settings. To do so, this study investigates the combined use of boundary tones and grammatical suffixes in various interactional contexts as well as the prosodic

manipulation used to control the pace of talk. Moreover, prosodic error types speakers made in L2 prosody are described and compared with controls.

## **1.2 Research questions**

In this dissertation, the following research questions are addressed:

- 1) How are interactional and/or pragmatic meanings achieved through prosody and grammar? How do L2 speakers (i.e., native English speakers of Korean, native Korean speakers of English) use such linguistic resources to interact with other speakers? What are the differences in the use of the linguistic resources between speakers at different proficiency levels?
- 2) What types of phonetic/phonological errors, which are not related to interactional and/or pragmatic meanings, are made by L2 speakers? In other words, what makes L2 speakers talk sound “foreign”?
- 3) Are speakers who are proficient at using L2 prosody for interactional/pragmatic purposes (RQ1) also proficient at using L2 prosody in a phonetically/phonologically accurate way (RQ2)? Or, is the inverse true? Is there a relationship, in terms of acquisition order, between the acquisition of prosody for interactional/pragmatic meanings and that of phonetics/phonology?

## **1.3 Dissertation overview**

This dissertation is organized as follows. Chapter 2 describes the data and methodology used in this dissertation. Chapter 3 presents relationships of boundary tones and grammatical suffixes and their pragmatic meanings produced by L2 speakers. Among various prosodic



features for meaning negotiation, Chapter 4 focuses on prosody-syntax mismatches enabling L2 speakers to continue their turns. In particular, parenthetical constructions will be examined in which the speaker supplements their utterances with parenthetical information relevant to the previous or upcoming talk. Chapter 5 analyzes error types in prosody made by L2 speakers. Chapter 6 concludes with a summary and a discussion of the implications of the findings.

## **CHAPTER 2**

### **DATA AND METHODOLOGY**

#### **2.1 Data**

##### **2.1.1 Korean L2**

Korean L2 data was collected from Oral Proficiency Interviews (OPI) conducted according to the OPI familiarization manual (2012). The interviews consist of four mandatory phases: warm-up, level checks, probes, and wind-down. During the warm-up, the interviewer asks for information about the interviewee such as name, hometown, occupation, or hobbies. This phase attempts to create a comfortable atmosphere for interviewees; it is also an opportunity for the interviewer to collect possible topics to be developed during subsequent phases. In the level check phase, the interviewer checks the interviewee's base or floor level of oral proficiency, at which the interviewee can respond to questions with confidence and accuracy. In the probe phase, the interviewer finds the ceiling level, one level beyond the floor level, at which the interviewee shows linguistic breakdown due to limited vocabulary, grammar, or lack of knowledge on the topic. The level check and probe phases are iterated back and forth until the interviewer has sufficient evidence to rate the interviewee's sublevel (low, mid, and high). For example, the interviewer gives a rating of intermediate low if the interviewee's responses are closer to the intermediate level, and gives a rating of intermediate high if responses are closer to those of the advanced level. An intermediate mid level is given when the interviewee shows an in-between state. In addition, each interview contains a role-play. During the wind-down, the interviewer returns the speaker to real life by asking about their plans after the interview.

The OPIs were conducted on Skype, over the phone, or in face-to-face contexts, and were audio-recorded in Audacity®. Before beginning the interview, the interviewer informed the subjects that the interview was being recorded, and asked the interviewees to respond in Korean as much as they could to elicit a sufficiently large language sample. After the interview, the certified tester rated the interviews based on the rating rubric. Out of the 35 interviews, those containing target grammatical suffixes were selected for analysis. Interviews with excessive background noise were not included due to difficulties in analyzing pitch contours. Thus, six interviews with advanced speakers and another six with intermediate speakers were selected. The participants filled out language background information sheets (Appendix A) and the information was used to see which factors affected the speakers' Korean prosody. To avoid bias, the language background information was collected after the interview. The interviews were transcribed using InqScribe, a transcription software. Prosody analysis was conducted using Praat.

The twelve participants were all monolingual American English speakers born and educated in the U.S. Six were intermediate level speakers of Korean (four male and two female), and the other six were advanced level speakers (five male and one female). Korean-Heritage speakers or second-generation Korean speakers were excluded from this study because they might have received more Korean input from family members since childhood than did participants who learned Korean primarily in the classroom as adults. Table 2.1 shows participants' language backgrounds. As can be seen, no single factor can explain individual participants' proficiency in Korean since the factors vary to a great extent. Instead, this information enables a general understanding of their language experience or background in Korean, which may be relevant to their Korean intonation.

Table 2.1 Korean L2 speakers' language background information

	Participants (Gender): connection to Korean language	Length of residence in Korea	Instruction type & Length	Daily use of Korean	Other languages
Intermediate	A (M): SAT instructor in Korea	3 yrs.	College & college language institute for 1.5 yrs.	20% with friends	Spanish
	B (F): English instructor in Korea	14 yrs.	Sunday school & private institute for 2 yrs.	5-10% with friends	N/A
	C (M): Graduate student in Korean religion studies	5 yrs.	College & monastery for 6 yrs.	5% with friends	Japanese
	D (M): US Army in Korea	1 yr. & several visits	Military language school for 11 mos.	5% with friends	Spanish, Japanese
	E (F): Majoring in Korean; Exchange student in Korea	6 mos.	College for 2.5 yrs.	15% with friends & at school	N/A
	F (M): Missionary in Korea	2 yrs.	Missionary training center for 2.5 mos. + self study 1.8 yrs.	5% with wife and at church	N/A
Advanced	G (M): Graduate student in Korean history	1 yr. & several visits	College for 11 yrs.	20% with friends & at school	German
	H (M): English instructor in Korea	5 yrs.	College for 3 yrs. & on and off self- study	25% with friends and others aside from his English language students	N/A
	I (F): majoring in Korean; excl student in Korea	1 yr.	College for 3 yrs.	40% with friends & at school	N/A
	J (M): Majoring in Korean language in a graduate school program	1 yr.	College for 2 yrs.	60% with friends in the same program	N/A
	K (M): Missionary in Korea	3 mos.	College & missionary service for 4.5 yrs.	45% with wife	N/A
	L (M): Graduate student in East Asian Languages and Cultures	3 yrs.	Grad school for 2 yrs.	25% with friends in the same program	Japanese & Chinese

Four native Korean speakers were interviewed and their performance was analyzed as a control. The native Korean speakers were born and grew up in Seoul, Korea, and came to the U.S. after age twenty-five to pursue a master's or doctoral degree. There was one interviewer, a native Korean speaker. The interviewer was myself, born and raised in Seoul, Korea, until I completed

my master's degree. I was a doctoral student at UCLA at the time of the interviews, and was a certified OPI tester in Korean.

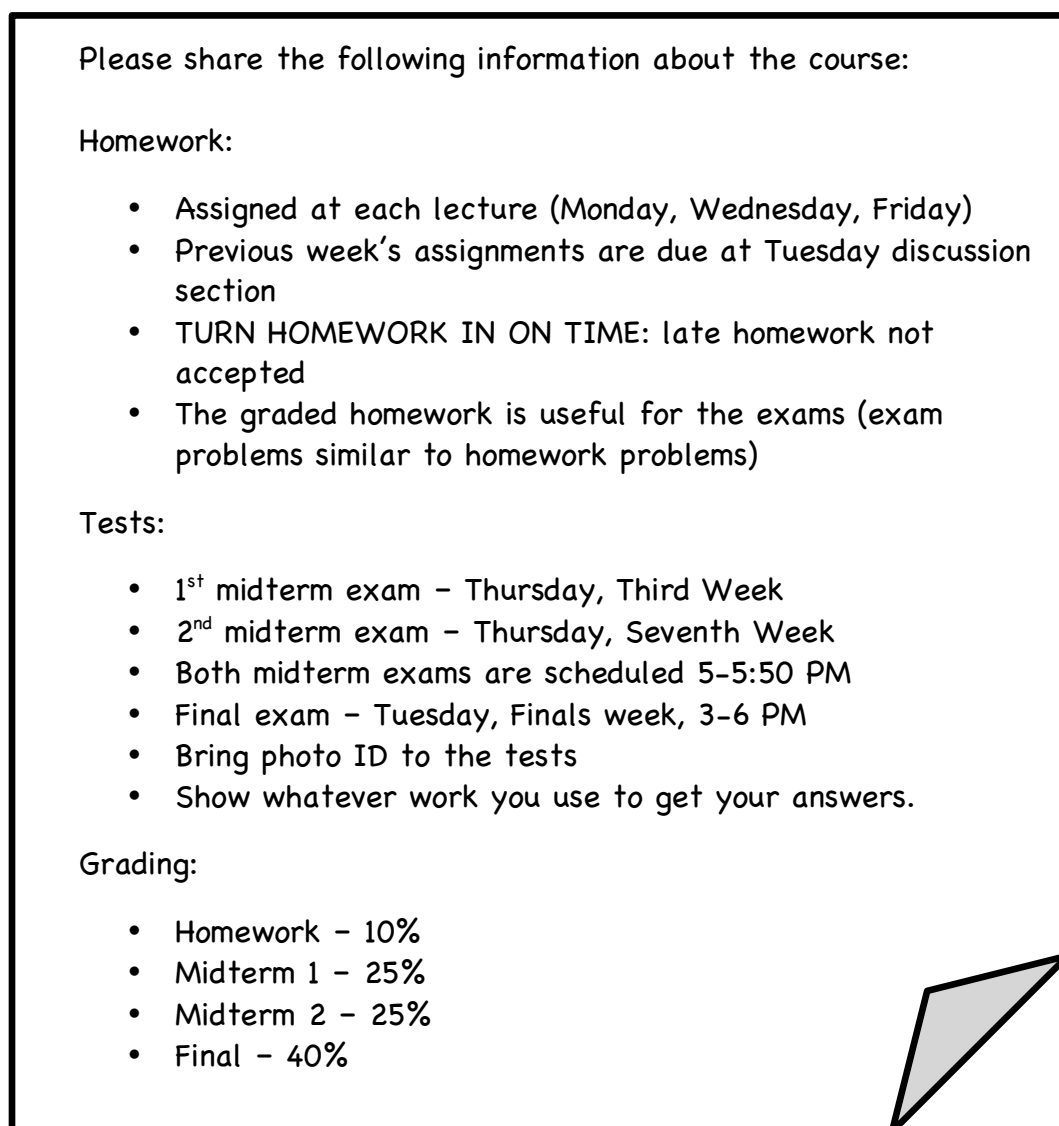
In this study, the analysis focuses on the major levels only, because defining sublevels by prosody use can be very subtle. Intermediate speakers were asked intermediate level questions as a level check and advanced level questions as a probe; advanced speakers were asked advanced level questions (level check) and superior level questions (probe). Intermediate-level questions were also posed to the advanced speakers as a way to lead into higher-level questions in the warm-up phase. The study examines only questions that were given at both levels, i.e., the intermediate and advanced questions. During the interview, speakers at the intermediate level are expected to talk about familiar topics from daily life, e.g., self, family, hobbies, etc., in discrete sentences or strings of sentences; they should also be able to ask questions in the role-play. Advanced speakers are expected to deal with a wide range of topics on community, society, or international interests, in addition to topics of personal interest. Moreover, they have to handle unexpected complicated situations during the role-play, e.g., ask for a return at a store. The text-type of advanced responses is paragraph-level discourse consisting of coherently connected sentences.

### **2.1.2 English L2**

The English L2 data was collected from the Test of Oral Proficiency (TOP) at UCLA. TOP is an oral proficiency test for International Teaching Assistants (ITAs), which examines ITAs' speaking ability when delivering teaching materials in discussion sections and when interacting with undergraduate students in English. TOP consists of three tasks: a self-introduction, a syllabus presentation, and a prepared mini lecture in the ITAs' major subject area.

To limit the type of words and phrases used and to obtain comparable language samples, this dissertation analyzes the ITAs' performance on the syllabus presentation. All ITAs presented the same information based on the same syllabus format. Figure 2.1 shows the syllabus format used for analysis. The syllabus contained course information about class times, homework assignments, test dates, and grading policy.

Figure 2.1 Syllabus format



Please share the following information about the course:

Homework:

- Assigned at each lecture (Monday, Wednesday, Friday)
- Previous week's assignments are due at Tuesday discussion section
- TURN HOMEWORK IN ON TIME: late homework not accepted
- The graded homework is useful for the exams (exam problems similar to homework problems)

Tests:

- 1<sup>st</sup> midterm exam - Thursday, Third Week
- 2<sup>nd</sup> midterm exam - Thursday, Seventh Week
- Both midterm exams are scheduled 5-5:50 PM
- Final exam - Tuesday, Finals week, 3-6 PM
- Bring photo ID to the tests
- Show whatever work you use to get your answers.

Grading:

- Homework - 10%
- Midterm 1 - 25%
- Midterm 2 - 25%
- Final - 40%

The syllabus presentation in the TOPs was conducted in a classroom at UCLA. ITAs stood before the blackboard acting as a TA and two undergraduate questioners sat in the classroom in the role of students. Two graduate student raters sat behind the questioners and rated the ITA's presentation. A camera was placed back of the classroom to record the ITAs' presentation. While test-takers presented the syllabus, two questioners interrupted the presentation and asked common classroom questions (e.g., Is the final cumulative? Can we do the homework in a group? What is the format for the midterm or final?). The raters were trained in the TOP scoring rubric and documentation. They managed the test progress and had ITAs move on to the next task during the test. To maintain the confidentiality of the ITAs, the analysis used audios only, extracted from the videotaped presentations. The tests were transcribed using InqScribe. Tonal labeling was conducted in Praat.

Twelve native Korean speakers' syllabus presentations in English were examined. All were international graduate students who intended to be teaching assistants at UCLA. Six received a passing score (7.1-10) in the syllabus presentation and the other six failed (2.5-6.3). Table 2.2 presents the gender, scores, and majors of the speakers.

Table 2.2 English L2 speakers' gender, score, and major

	Participants (Gender):	Test score	Major
Fail	F1 (M)	5.8	Electrical Engineering
	F2 (M)	6	Electrical Engineering
	F3 (M)	6.1	Civil & Environmental Engineering
	F4 (F)	6.3	Chemistry & Biochemistry
	F5 (M)	6.3	Computer Science
	F6 (M)	6.3	Computer Science
Pass	P1 (M)	7.1	Computer Science
	P2 (M)	7.2	Computer Science
	P3 (M)	7.9	Economics
	P4 (M)	8.2	Mechanical & Aerospace Engineering
	P5 (F)	8.2	Mechanical & Aerospace Engineering
	P6 (M)	9	Computer Science

This collection of data was obtained from the Office of Instructional Development at UCLA and thus individual language background information is not available. As a control, three native English speakers presented the same syllabus prompt. The native speakers were monolingual American English speakers who were born and educated in the U.S. They majored in chemistry with three different degree objectives: one undergraduate student, one doctoral student, and one postdoctoral scholar.

## 2.2 Methodology

This dissertation analyzes the role of prosody and grammar in conveying pragmatic meanings through the course of interaction among L2 speakers and how the L2 prosody is



realized. The analysis focuses on how speakers' language use (e.g., prosody, grammar) is shaped by interaction and how the linguistic resources achieve interactional goals among speakers depending on contexts. Thus, the meaning of linguistic resources is emergent in interaction and sensitive to contexts, rather than having a fixed meaning. Korean data was transcribed in three-line transcription: the first line shows Korean words in Yale Romanization, the second line is morpheme-by-morpheme translation, and the third line is English translation. The Korean data was transcribed in *Hangul*, the Korean writing system, at the end of the three-line transcription. Prosody was analyzed according to the Autosegmental-Metrical model of intonational phonology of English and Korean, and labeled according to the Tones and Break Indices (ToBI) transcription system of each language.

### **2.2.1 Autosegmental-Metrical model of intonational phonology**

Influenced by Bruce's (1977) seminal work on Swedish word accents and phrasal intonation, the autosegmental-metrical (AM) model of intonational phonology was proposed by Pierrehumbert (1980). This model adopts a two-level (High tone & Low tone) tonal contrast and a linear representation of tone levels. Therefore, pitch contours in the AM model are analyzed as a linear sequence of a high tone (H) and a low tone (L) and their combinations. H and L are determined on the basis of relative tone height rather than based on absolute values and the speaker's pitch range. In the AM approach, an intonation contour defines prosodic grouping and prominence relations. The prosodic grouping is based on the hierarchical relationship among prosodic units such as an Intonation Phrase (IP), an Intermediate Phrase (ip), and an Accentual Phrase (AP), as shown in Figures 2.2 and 2.4.

The types of prosodic units present may vary depending on the language. For example, English intonation consists of IPs and ips (Beckman & Pierrehumbert 1986), but Korean intonation has all three units (Jun 2007, 2011). Languages also differ in how the prominence relations are marked. Jun (2005, 2014) categorizes languages into three groups depending on their type of prominence marking: West Germanic languages including English are head-prominence languages and mark the head (i.e., stressed syllable) of prosodic units with pitch accents; Korean and Mongolian belong to edge-prominence languages in which prominence is realized by marking the edge of prosodic units with phrasal or boundary tones. The following sections introduce intonation frameworks for Korean and English adopting the AM approach.

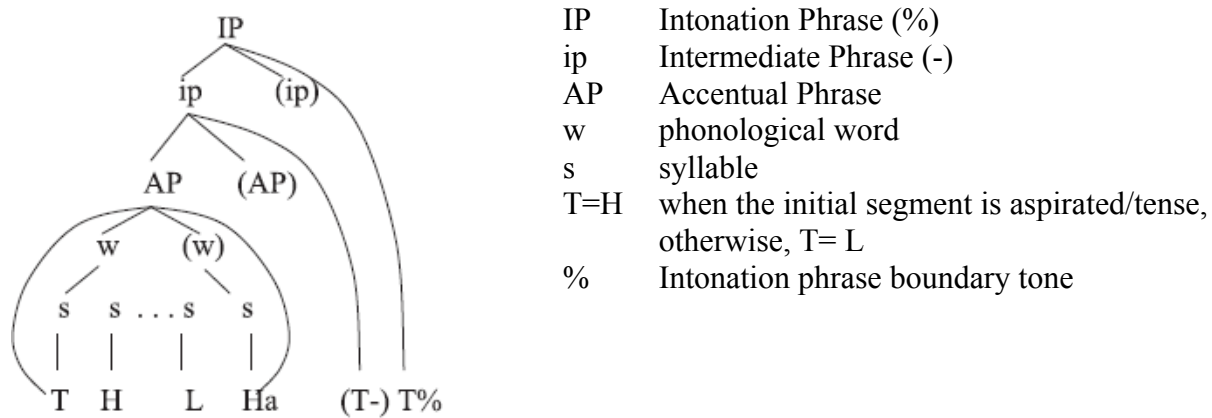
### **2.2.2 Korean intonation and Korean Tones and Break Indices (K-ToBI)**

The transcription system of Korean (Seoul) intonation, known as Korean Tones and Break Indices (K-ToBI) was proposed by Jun (2000) based on the AM model of intonational phonology of Korean established in Jun (1993, 1998). In Jun's 1993 model, the intonational structure of Seoul Korean is hierarchically organized into two prosodic units: an Intonation Phrase (IP) and an Accentual Phrase (AP). An IP is the largest prosodic unit that can have more than one AP. The IP juncture is marked by phrase-final lengthening, a boundary tone (%), and an optional pause following the unit. An AP can consist of more than one phonological word(s) (*w*), but usually includes only one word. The word is composed of a combination of a lexical item and a postpositional particle attached to the item (*chayksang-ey* desk-on 'on the desk').

This model was revised in Jun (2006, 2007, 2011) to include an Intermediate Phrase (*ip*), a prosodic unit smaller than an IP and larger than an AP. An *ip* has two functions. It can mark syntactic grouping or prominence. When an *ip* marks a syntactic grouping, the final syllable of

an ip can be realized with a slight lengthening, which is noticeably shorter than the lengthening of the IP but slightly longer than a juncture between APs. In this case, the right edge of an ip is marked by a boundary tone, High or Low, but the most common ip boundary tone is High (H-). When an ip marks prominence, the ip-initial word receives prominence, realized with an expanded pitch range. In this case, the right edge of an ip is not marked by a boundary tone, and the final syllable of the preceding ip is not lengthened. Therefore, in the revised model, there are three prosodic units above the word, as shown in Figure 2.2: 1) the Intonation Phrase (IP), 2) the Intermediate Phrase (ip), and 3) the Accentual Phrase (AP). The revised model of Korean Intonation is adopted in this dissertation to analyze L2 Korean intonation data.

Figure 2.2 Intonation model of Seoul Korean<sup>2</sup>



The AP in Korean is the smallest prosodic unit that is tonally defined. Both the left and right edges of an AP are marked by the first two and the last two tones, respectively. The first two tones on the left edge are realized on the two AP-initial syllables, and the last two tones on the right edge are realized on the two AP-final syllables. The AP-initial syllable gets a high tone

<sup>2</sup> The figure is from Jun & Cha (2015).

(H) when it begins with a tense consonant (e.g., /p\*, t\*, k\*, s\*/) or an aspirated consonant (e.g., /k<sup>h</sup>, t<sup>h</sup>, p<sup>h</sup>, h, s/); otherwise, it gets a low tone (L). When an AP has more than three syllables, the second syllable of an AP is realized with a high tone, and the two AP-final syllables are realized with a rising tone, with L and H on the penult (i.e., the second to last syllable) and final syllable, respectively. The syllables between the second and penultimate syllable are realized by interpolating between the H on the second syllable and L on the penultimate syllable. Therefore, when an AP is longer than three syllables, it is realized with a LHLH or HHLH tone pattern. But when an AP is shorter than four syllables, the medial two tones, H on the second and L on the penult, can be undershot (not realized on the surface), surfacing with various tonal patterns such as LLH (when the H is undershot, i.e., L(H)LH), LHH (when the L is undershot, i.e., LH(L)H), and LH (when both H and L are undershot, i.e., L(HL)H).

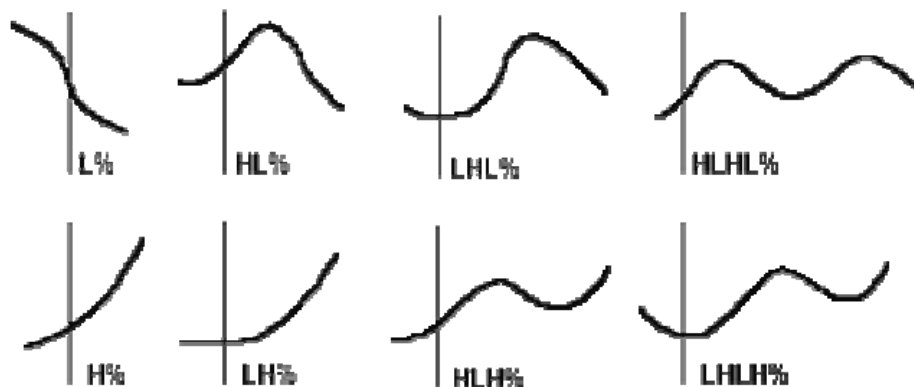
Among these prosodic features, IP-boundary tones are realized on the final syllable of an IP, which is often the utterance-final suffix in Korean, and convey various pragmatic meanings in Korean conversation (Jun, 2000; Park, 2003). In other words, pragmatic meanings are mostly conveyed at the end of the utterance through boundary tones and utterance-final suffixes.<sup>3</sup> Nine boundary tones have been identified so far and are represented in Figure 2.3, taken from Jun (2000). The vertical line is the boundary between the last and penultimate syllables of the IP. The tonal contour to the right of the vertical line is the boundary tone realized on the final syllable. There are monotoness (L%, H%), bitones (LH%, HL%), and multitones (LHL%, HLH%, LHLH%, etc.). The tone height of L and H is relative: a high tone is assigned relative to the surrounding tone height. The contours shown in Figure 2.3 are schematic pitch contours for each boundary tone pattern. LHLHL% is not shown in the figure below, but the contour resembles a

---

<sup>3</sup> Chapter 3 provides a more detailed description of the meaning of boundary tones.

combination of LHLH% and L%, having a falling tone after the LHLH contour.

Figure 2.3 Nine boundary tones in Korean (LHLHL% is not shown)

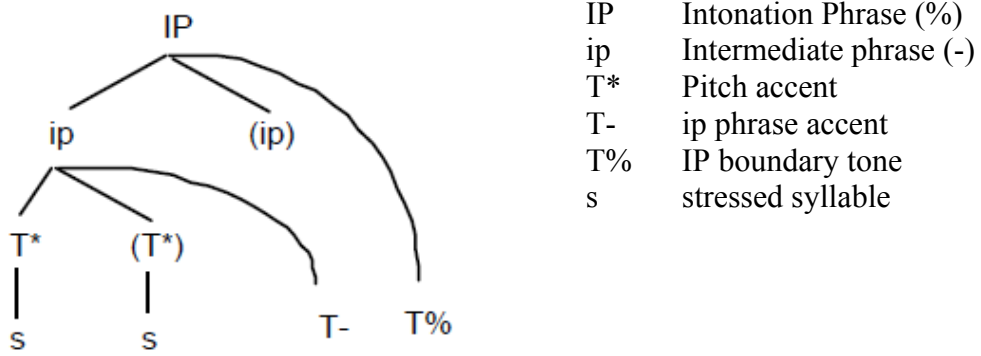


### 2.2.3 Mainstream American English intonation and MAE-ToBI

The AM model of English intonational phonology was proposed by Pierrehumbert (1980) and Beckman and Pierrehumbert (1986). The prosodic hierarchy is shown in Figure 2.4. As a head-prominence language, word prominence is marked by pitch accents. The stressed syllable of a prominent word receives a pitch accent (L\*, H\*). An ip should have at least one pitch accent, and the last pitch accent in an ip is a nuclear pitch accent because it is the most prominent among the pitch accents in the same ip. There are six types of pitch accents: L\*, H\*, L\*+H, L+H\*, H+!H\*, and !H\*. Same as Korean, the last syllable of the largest prosodic unit, the IP, is realized with a boundary tone (L%, H%), and this syllable is where substantial lengthening occurs. A phrase accent (L-, H-) is not realized on a particular syllable but fills the space between the nuclear pitch accented word and syllable before the boundary tone, or between the nuclear pitch accented syllable and the ip-final syllable when the ip is IP-medial. The phrase accents mark the

ip boundary, and the last syllable of the ip is marked by phrase-final lengthening, but the degree of lengthening is weaker than that of IP-final lengthening.

Figure 2.4 Intonation model of English



**CHAPTER 3**  
**SECOND LANGUAGE PROSODY AND PRAGMATICS:**  
**THE CASES OF *(NU)NTEY* AND *KETUN***

**3.1 Introduction**

Prosody has been considered one of the determining factors in conveying meaning in spoken discourse. Selting (2010) stated that prosody was not only a “(co)constitutive” element in speaking, which was mandatorily employed on grammatical and lexical items in speaking, but also a decisive factor determining action types of a language. Example 3.1 shows that *was* ‘what’ in German has three different meanings depending solely on the prosodic distinction realized on *was*.

Example 3.1 *was* ‘what’ as an open-class repair initiator (from Selting, 2010, p.6)

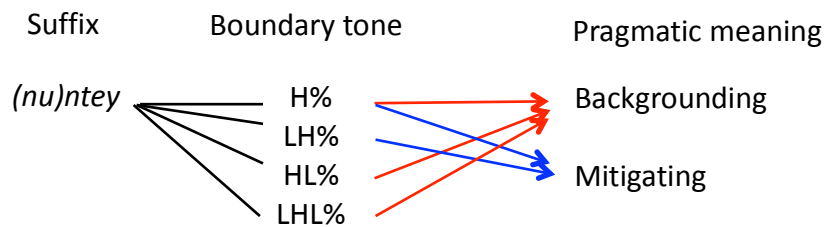
- a. *was*, signals a problem in acoustic decoding with rising boundary tone and normal loudness and lengthening;
- b. *was*. signals a problem of referential understanding with falling boundary tone and normal loudness and lengthening;
- c. <<h>!WAS!> signals a problem of expectations, i.e., surprise or astonishment, with a higher boundary tone and greater loudness, optionally with greater lengthening

However, there are a few studies examining prosody used by second language (L2) speakers.

This chapter examines the significant role of prosody in conveying various pragmatic meanings in interview contexts. Specifically, this analysis focuses on boundary tones and their realization

on Korean suffixes *(nu)ntey* and *ketun*.<sup>4</sup> As an agglutinative language, Korean suffixes are attached to stems of predicates (H. Sohn, 1999) and boundary tones are realized on the last syllable of suffixes, e.g., *tey* in *(nu)ntey* and *tun* in *ketun* or on the last syllable of speech style suffix, e.g., *yo* in *ketun-yo*. The suffixes have different pragmatic meanings depending on their combination with different boundary tones and contexts. The figure below illustrates the relationship between pragmatic meanings achieved through varying combinations of suffixes and boundary tones.

Figure 3.1 Relationship between pragmatic meanings and the combination of suffixes and boundary tones



Because pragmatic meanings are largely achieved by independent words in non-agglutinative languages such as English (H. Sohn, 1999), L2 speakers from non-agglutinative languages may have difficulty in acquiring the combination of suffixes and boundary tones in Korean.

<sup>4</sup> These suffixes were chosen for analysis because they occurred the most frequently in both native and non-native speakers' data collected in the current study. Other suffixes and their prosody will be examined in future study.



## 3.2 Previous studies on *(nu)ntey* and *ketun*

### 3.2.1 *(Nu)ntey*

*(Nu)ntey* is attached to verbal stems and used as a clause-final or a sentence-final suffix.

The clause-final *(nu)ntey* marks 1) “circumstantial or background information” for the subsequent clause, or 2) a contrastive relationship between two clauses. An English translation of *(nu)ntey* would be ‘and’, ‘so’, ‘but’, ‘while’, and ‘in the circumstance that’ (Sohn, 2016). In Example 3.3, *nuntey* provides background information for the upcoming request and justifies the necessity of greeting the guest. In Example 3.4, *-nte*y connects contrastive descriptions of the height of A and B.

Example 3.3 (From Sohn, 2016, p.3)

sonnim-i o-sy-ess-nuntey naka po-sey-yo.  
guest-NOM come-SH-nuntey go out try-SH-POL  
**‘The guest is here; why don’t you go out and greet him?’**

Example 3.4

*A-nun khi-ka khu-nte*y *B-nun khi-ka cak-ayo*  
A-TP height-SBJ tall-nuntey B-TP height-SBJ short-POL  
**‘A is tall but B is short’**

Interestingly, in speaking, *(nu)ntey* is used more as a sentence-final suffix and displays the speaker’s dispreferred stance such as disagreement or denial. Park (1999) found that 70% of tokens of *(nu)ntey* in her conversational data were used to complain, disagree, deny, or make a request at the sentence-final position. In Example 3.5, L and C are talking on the phone. C asks L whether *Sanghwun* is at home with the implication that C would like to speak to him (line 4).

Responding to C's request, L identifies the caller (lines 5-6) and says that *Sanghwun* seems to have gone to school (lines 7-8).

Example 3.5 (L and C) (Park, 1999, p. 204)

- 4 C: Han Sanghwun iss -sup -nikka?  
Han Sanghwun exist -DEF -INTERR  
**'Is Han Sanghwun there?'**
- 5 L: A: Choi senpay-sey -yo?  
Oh Choi senior -HONOR-POL?  
**'Oh Are you Mr. Choi?'**
- 6 C: Yeyyey  
Yes yes  
**'Yes'**
- 7 L: Yeyyey Sanghwunssi -ka hh hakkyo: (.) hh ka -n  
Yes yes Sanghwun Mr. -SUB hh school hh go-ATTR
- 8 -> ke kat -*untey* -yo.  
thing be: like -CIRCUM -POL  
**'I see. Sanghwun seems to have gone to school nuntey.'**
- 9 C: Yey::  
Yes  
**'Oh, I see.'**

Here, note that L does not directly say that *Sanghwun* is not home but implies the unavailability of *Sanghwun* instead, using *untey*. While L's rejection would sound impolite and direct if it ended with the polite suffix *yo* only, Park argues that the suffix *untey* conveys the rejection implicitly and mitigates the rejecting tone. In Example 3.6, tutor M and tutee U are talking on the phone. The tutee is asking for extra tutoring sessions for the upcoming quiz.

Example 3.6 (7) (M and U) (from Park, 1999, p. 197)

- 1 U: Sensayngni: :m  
Teacher  
**'Teacher'**
- 2 M: Yeyyey  
yes yes  
**'Yes yes'**
- 3 U: ce taum cwu wuelyoilnal sihem iss -ketun [-yo  
I next week Monday exam exist-CORREL-POL  
**'It's that I have an exam next Monday'**
- 4 [E: :k  
EXCL  
**'What!'**
- 5 M: °hhh nayil?  
Tomorrow  
**'Tomorrow ?'**
- 6 U: ai aniyo hhh kukka tolaonun  
EXCL No hhh DM the coming  
**'Oh no, hhh I mean the coming one.'**
- 7 M: ee: yeyyey  
Oh yes yes  
**'Oh I see.'**
- 8 U: kulaykackwu: sensayngnim mwe-ci?  
So teacher what -JUDG?
- 9 com te ssu- ha -si -ess -umyen coh -keyss  
a little more use- do -HONOR -ANT -COND good -DCT:RE
- 10 -> -nun[tey:  
-CIRCUM  
**'So teacher, it would be good if you would (=Could you) do a little more -nuntey.'**
- 11 M: [Yeyyey. Cal toy -ss -ta:  
Yes yes well become -ANT -DECL  
**'I see. That's good.'**

At line 3, the tutee U provides background information for the upcoming request by saying that she has a quiz next Monday. The actual request is made at lines 9-10 after clarifying the quiz date at lines 5-7. When requesting, note that U expresses her “hope” to have additional sessions rather than overtly asking for more sessions. It is the interlocutor M who needs to work on figuring out that the implied message is a request from the *nuntey* sentence.

L2 use of *(nu)nuntey* has been examined by Kim (2009). By examining 9 hours of audio-recorded conversation between native Korean speakers and L2 speakers, Kim found that L2 speakers used *(nu)nuntey* turn-medially and turn-finally for different purposes and only advanced speakers were able to use *(nu)nuntey* turn-finally. She analyzed that the turn-medial *(nu)nuntey* was used to mark pre-to-main action before the speaker delivered dispreferred actions (e.g., disagreement, complaint). That is, the speaker begins the talk with positive components (e.g., agreement, applause) as presequence and orients it to the main dispreferred action. In Example 3.7, the native Turkish L2 speaker Liz complains about the program she attended (lines 21-25, 27-31) after she praises about the program first (lines 17-19). Here, the turn-medial *(nu)nuntey* connects the presequence and the main action.

Example 3.7 (From Kim, 2009, p. 334-335)

- 17 L: nanun (2.6) kulssey solcikhi (1.2) acwu  
*I-TOP well honestly very*
- 18 cohahayyo, yekise kongpuhanun kesto acwu  
*like-POL here study-ATTR thing-also very*
- 19 -> cohanuntey  
*like-CIRCUM*  
*"for me, well, honestly, I like it very much, I like studying here very much, too -nuntey"*
- 20 H: yey::::  
*yeah*  
*"yeah"*
- 21 L: ku ke enehak, (.) com kulen



*DCTRE-FR-POL*

*"then maybe you would visit Korea again sometime in the future"*

03 (1.3)

04 T: kuleh-ki-l pala-yyo, encey ka-l-ci (0.6)  
*so-NOML-ACC hope-POL when go-ATTR-NOML*  
05 hwaksilhi molu-keyss-eyo. ipen (0.8) ipen  
*certainly not know-DCTRE-POL this this*  
06 yelum-ey:: (1.1) ilpon-ey kako siph-eyo.  
*summer-in Japan-to go-CONN wish-POL*  
*"(I) hope so, though I'm not sure when I can visit Korea. This, this*  
*summer, I'd like to go to Japan"*

07 H: e:: [:::  
*oh*  
*"oh"*

08 T: -> [mwe ilpone: (.) payweya toynuntey,  
*DM Japanese learn-NECE become-CIRCUM*  
*"well, I should learn Japanese nuntey"*

09 H: a:::, ilpone com ha-se-yyo?  
*ah Japanese a little bit speak-HON-POL*  
*"oh, so you speak Japanese a little bit?"*  
10 (0.7)

11 T: cokkum al-aya.  
*a little bit know-POL*  
*"I know just a little bit"*

12 H: [e::::

13 T: [yey:: ipen clkum, (1.4) one o two (0.4)  
*yeah this now one oh two*  
*"yeah, this, now, 102"*

Section 3.3 will examine examples of *(nu)ntey* in L2 data in relation to the use of boundary tones.

### 3.2.2 *Ketun*

*Ketun* can be used clause-finally or sentence-finally. The clause-final *ketun* has a conditional meaning ‘if’ as in Example 3.9:

Example 3.9 (From Lee, 1993, p.466)

maum-ey tul-*ketun* sa-sey-yo.  
mind-in enter-*ketun* but-HN-POL  
**If you like it, buy it.**

According to Park (1998), such conditional meaning of the clause-final *ketun* is used more in written contexts, however, and, in speaking, *ketun* has developed into a sentence-final particle after the grammaticalization process. The meaning of the sentence-final *ketun* can be translated into ‘you see,’ ‘the thing is,’ or ‘the fact is’ in English. In her analysis, Park (1998) described *ketun* as as a “provider of ‘footnotes,’” which adds information relevant to the ongoing talk and supplements the talk. Kim and Suh (2010) showed that such footnote use occurred when *ketun* was parenthetically inserted in ongoing talk. Consider Example 3.10. Previous to the excerpt, the speakers talked about beautiful beaches they had been to. B talked about her own experience at a private beach which only celebrities or residents of the neighborhood could enter. In this excerpt, in the parenthetical insert, B explains how she was able to get into the beach (lines 197-198, 201). Then, B continues to talk about his experience at the beach by returning to the main point (from line 203).

Example 3.10 (4) (Conference Lunch Talk)<sup>5</sup>

197 B: cey chinkwu-ka keki -se pata kwanli -lul  
my fiend -NOM there-LOC sea management-ACC

198 hayyo kulay[kaciko=  
do:POL so  
**"My friend is managing the beach facilities there, so,"**

199 S: [aha: [:aha:[:

---

<sup>5</sup> The example was originally from Park (1998) and was used in Kim and Suh (2010) for the sequential analysis of *ketun* as a “provider of ‘footnotes’” in the parenthetical insert.

- CST  
아하::  
**"Oh"**
- 200 K: [eng. yes  
응.  
**"I see."**
- 201 B: -> =com kongcca-lo tuleka-lswuiss -ketun-yo?  
a:little free -INSTR enter-be:able:to-ketun-POL  
  
제 친구가 거기서 바다 관리를 해요.  
그래가지고 좀 공짜로 들어 갈 수 있거든요?  
**"I can go there with no admission fee."**
- 202 U: um::  
DM  
음::  
**"I see."**
- 203 B: -> .hh kuntey (0.5) kunyang pata-nun pata  
DM just sea -TOP sea
- 204 -> ta ttokkat -untey icey ku ceki  
all the same-CIRCUM now that there
- 205 B: [khontulol-i toy -ko incey (.) incey (.)  
control -NOM become-CONN now now .hh  
근데 (0.5) 그냥 바다는 바다 다 똑같은데 이제 그 저기 콘트 롤이 되고 인제  
(.) 인제(.)  
  
**".hh but (0.5) it's just a sea all right, just like any other sea but, now,  
that, that, it's being controlled and, now, (.) now, (.)"**
- 206 K: [khentulol-i  
control -NOM  
콘트롤이 "(It's being) controlled."
- 207 B: kywuacey -ka iss -unikka,  
restriction-NOM exist-REASON  
규제가 있으니까,  
**"because it is a restricted area,"**
- 208 K: e[m  
yes  
엄  
**"Yes."**



In addition, Kim and Suh (2010) showed *ketun* occurring in a pre-sequence, a preliminary sequence which projects a main action (e.g., a request, a story-telling, etc.). Consider Example 3.11.

Example 3.11 (Overheard Conversation, from Kim and Suh, 2010)

- 1      A:      wuli nala -ey yelyeses-kay sito -ka  
                 our nation-LOC sixteen-CL city/province-NOM
- 2            -> iss -ketun-yo?  
                 exist-ketun-POL  
                 우리나라에 열여섯 개 시도가 있거든요?  
                 **"Our nation has sixteen city and province areas."**
- 3      B:      ney.  
                 yes  
                 네.  
                 **"Yes."**
- 4      A:      yelyeses-kay sito -ka iss -nuntey,  
                 sixteen-CL city & province-NOM exist-CIRCUM  
                 열여섯 개 시도가 있는데,  
                 **"There are sixteen city/province areas and,"**  
                 ((A embarks on talking about the administrative system in Korea.))

Before starting the main telling sequence about the administrative system in Korea, B gives some preliminary information that Korea has 16 provinces, using *ketun* (lines 1-2). After receiving a go-ahead *ney* 'yes' from B (line 3), A resumes the main telling. The main telling would have not begun if the apre-telling ending with *ketun* did not receive a *go-ahead* from B.

Park and Sohn (2002) explored the relationship of *ketun* in sentence-final position with boundary tones. They found that the majority of tokens of *ketun* (80.4%) in their data were realized with H% and bridged two discourse segments before and after *ketun*. In Example 3.12,

M1 is talking about a man who performs very well in Bible study because of his amazing memory.

Example 3.12 (from Park & Sohn, p.6-7 Bible quiz)

- 1 M1: *ku pwun-i seymilhan pwupwun-ey tayhayse* A  
that person-NOM detailed part -at regarding
- 2 *kieklyek-i cohun ke kathay-yo.*  
memory-NOM good COMP seem-POL  
**'I think his memory for small details is very good.'**
- 3 M2: *a::*  
**'Oh'**
- 4 M1: *kulenikka kukey wuli-ka mayil* B  
thus that we-NOM everyday
- 5 -> *sengkyeng sihem-ul po-ketun-yo [H%] maycwu [H%]*  
bible test-ACC take-KETUN-POL every week  
**'That is, we always take the bible exam-KETUN, every week'**
- 6 *kuntey uyoylo mwuncey isanghan ke manha-yo.*  
but unexpectedly question weird thing a lot-POL  
**'but there are many weird questions.'**
- ((omitted))
- 10 M1: *oa::: cengmal ceyil elyewun mwuncey mak ceyil* C  
Wow really most difficult question very most
- 11 *heyskalli-nun mwuncey*  
confuse-REL question  
**'Wow. Even the most difficult question, the most tricky question,**
- 12 *ceyil ttaci-nun mwuncey ku pwun-i kunyang*  
most intrigue-REL question that person-NOM just
- 13 *ta maca-yo.*  
all be correct-POL  
**the most intriguing question, he gets them all right.'**
- 14 *ettehkey kulehkey toinun-ci molukeysse-yo*  
how so become-COMP not know-POL  
**'I don't know how he does that.'**

M1 compliments the man’s good memory in A (lines 1-2) and provides a specific example of his memory in C (lines 10-14) (i.e., the man gets all questions correct). B (lines 4-6), ending with *ketun*, provides background information for C (i.e., the questions are from weekly quizzes in the Bible study in which M1 participates). Thus, the function of B, which provides background information for the subsequent talk and connects two discourse segments, is similar to *ketun* in the parenthetical insert in Kim and Suh (2010) and to the provision of ‘footnotes’ in Park (1998). Section 3.4 will present examples of *ketun* in L2 data in relation to the use of boundary tones.

### 3.3 (*Nu*)ntey in second language discourse

In the data, L2 speakers used (*nu*)ntey to 1) provide background information for the upcoming clause or sentence in particular contexts (e.g., those involving information-giving or requesting) while holding the turn (i.e., as a backgrounder) and 2) mitigate a dispreferred tone while eliciting attention or a response from the interlocutor (i.e., as a mitigator). Importantly, the two different functions are achieved through different types of boundary tones as seen in Table 3.1 Whether the suffix is clause-final or sentence-final is also indicated in the table.

Table 3.1 Boundary tones and syntactic positions of (*nu*)ntey in two uses

	Backgrounder	Mitigator
Boundary tones	H%, HL%	H%, LH%
Clause- or Sentence-final	Both	Sentence-final

(*Nu*)ntey as a backgrounder was produced with H% or HL% and occurred both in clause-final and sentence-final positions. (*Nu*)ntey as a mitigator was realized with H% or LH% and occurred

in sentence-final position only. Table 3.2 shows the frequency of the boundary tones in two uses of *(u)ntey* produced by speakers at intermediate and advanced levels.

Table 3.2 Frequency of boundary tones realized on *(nu)ntey* across speakers at intermediate and advanced levels in two contexts

	Backgrounder		Mitigator	
	Int.	Adv.	Int.	Adv.
L%	4 (7%)	7 (4%)	0	0
H%	23 (40%)	67 (35%)	0	2 (66%)
LH%	6 (10%)	4 (2%)	1 (50%)	1 (33%)
HL%	21 (36%)	100 (52%)	0	0
LHL%	4 (7%)	14 (7%)	0	0
Sum	58	192	2 <sup>6</sup>	3

In backgrounder, at both proficiency levels, H% and HL% are realized more frequently than other boundary tones. H% and HL% were produced in over 36% of tokens of *(nu)ntey*, respectively, in intermediate speakers' data, while H% was produced in 35% of tokens and HL% in 52% of tokens in advanced speakers' data. Five tokens were found as a mitigator. All five occurred in sentence-final position. Two were realized with LH% and the other two were with H%. One token was not clear enough to analyze its boundary tone because the speaker's laughter overlapped with the production of *(nu)ntey* (Example 3.23).

<sup>6</sup> This total number of the mitigator use of *(nu)ntey* included the unclear realization of boundary tones shown in Example 3.23.

### 3.3.1 Backgrounder with H% and HL%

The backgrounder (*nu*)*ntey* was used to build background or preliminary information for upcoming talk. It prepared the interlocutor to understand the upcoming talk more easily or in a particular way. In an interview setting, speakers often attempted to continue their talk across many turns while the interviewer took a minimal turn. Analysis shows that L2 speakers used (*nu*)*ntey* to project multi-unit turns, coupled with the continuing boundary tones H% and HL%. This kind of response with the backgrounder (*nu*)*ntey* was described as “expanded responses” by Lee, Park, and Sohn (2011). In their analysis of the oral proficiency interview data, they found that advanced speakers provided more information than the interviewer’s question was intended to by employing grammatical suffixes including (*nu*)*ntey* and *ketun*. The grammatical resources enabled the speaker to save the turn for the upcoming talk while inhibiting the interviewer from taking the turn. The example below shows how the advanced speaker used the sentence-final suffix *ketun* to project the upcoming talk in a expanded response while allowing the interviewer to take only a minimal turn (i.e., go-ahead).

Example 3.13 (From Lee, Park, and Sohn, 2011, p. 95)

- 1 IR: kulem cheum-pwuthe pa:lo wan-o-thwu-bi-lo tulu-sye-ss-eyo?  
then beginning-from directly 102B-LOC take-SH-PAST-Q  
‘Then uh did you take 102B from the very beginning?’
- 2 (0.3)
- 3 IE: -> yey [kulay-ss-eyo.=yekise sihem-ul pwa-ss-ketun-yo,  
yes:POL be.so-PAST-DEC here exam-ACC take-PAST-you see-POL  
‘Yes, I did.=I took an exam here, you see?’
- 4 IR: [a:::  
oh  
‘Oh:::’
- 5 IE: (.) kka pass-lul hay-kac-kwu,  
I.mean pass-ACC do-and.then

‘I passed and then’

- 6 IR: nye:,  
yes:POL  
‘Yeah,’
- 7 IE: ye:. wan-o: wan-o-thwu:ei-ey tule ka-ss-eyo  
yes:POL 1-0 1-0-2 A-LOC enroll-PAST-DEC:POL  
‘Yeah. I enrolled in 1-0 1-0-2A.’

The analysis in Sections 3.3.1.1 and 3.3.1.2 show how speakers used *(nu)ntey* to elaborate responses to interview questions and establish background relevant to the upcoming pre-request in role-play situations in the interview context.

### 3.3.1.1 In responses

In Example 3.14, the interviewer (IR) asks advanced speaker Mike to give a detailed description of his room so the interviewer can visualize the room in her mind. Mike first reminds the interviewer of the background information that he has three roommates (lines 3-4), which was mentioned at the earlier part of the interview; then, he describes his apartment in detail, which is the foreground information or main focus of the response (lines 5-6). In this excerpt, Mike describes his entire apartment first and later describes his room in more detail. The background information is marked with the clause-final *nuntey* and helps the interviewer visualize the general appearance of his place.

#### Example 3.14

- 01 IR: Pang kwuco-ka ettekey toy-e-iss-nun-ci  
Room structure-SBJ how become-INF-exist-RL-whether
- 02 caseyhi malssumhay cwu-sey-yo.  
in.detail talk give-HN-POL

**Can you please describe to me in detail your room and the things in your room?**

03 M: iltan akka malssum tuly-ess-tusi  
first.of.all before talk give-PST-like

04 -> roommate sey-myeng-i iss-nuntey  
roommate three-person-SBJ have-nuntey [HL%]

**First of all, as I said before, I have three roommates,**

05 e ku pwuek hana iss-ko kesil hana iss-ko  
uh that kitchen one exist-and living.room one exist-and

06 hwacangsil twu-khan iss-ko  
bathroom two-place exist-and

**uh, well, there are one kitchen, one living room, and two bathrooms and,**

((M continues))

-----

01 IR: 방 구조가 어떻게 되어 있는지

02 자세히 말씀해 주세요.

03 M: 일단 아까 말씀 드렸듯이

04 -> 룸메이트 3 명이 있-는데[HL%]

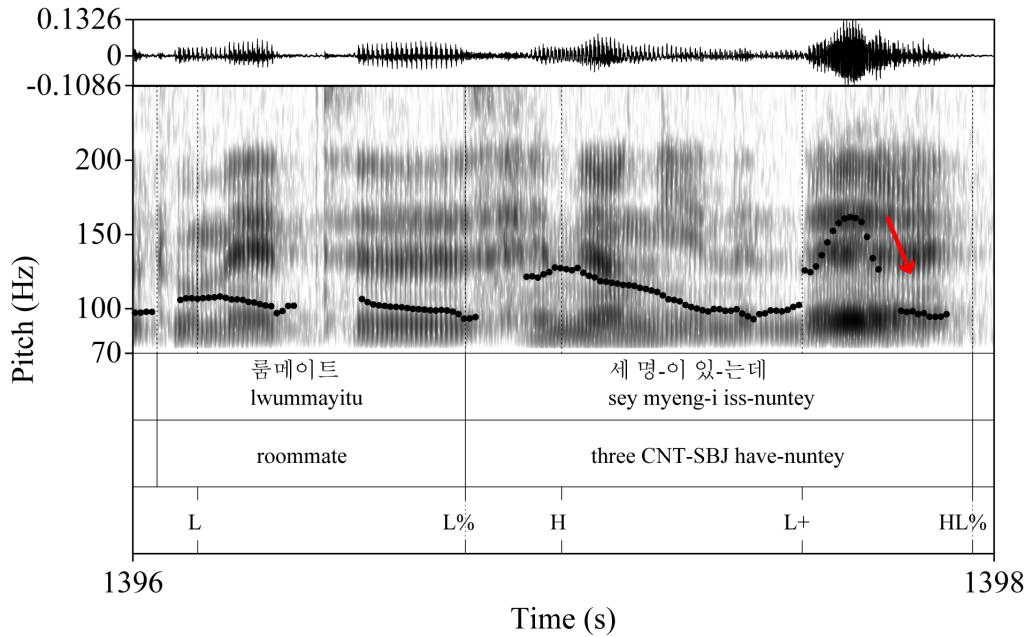
05 어 그(.) 부엌 하나 있고 거실 하나 있고

06 화장실 두 칸 있고

((M continues))

HL% is realized on the clause-final *nuntey* (Figure 3.2). The pitch contour marked with the red arrow indicates its falling shape from H to L. After *nuntey* [HL%], the interviewer does not interrupt Mike's turn until he finishes describing the place.

Figure 3.2 Pitch contour of HL% on *-nuntey*



Example 3.15 is a role-play between intermediate speaker Sarah and the interviewer. The interviewer, portraying an apartment office manager, asks about the features Sarah wants to move in. Sarah describes the size and location of the apartment she is looking for.

### Example 3.15

01 IR: etten conglyu-ui aphatu-lul wenha- chac-ko kyey-sey-yo?  
which type-POSS apartment-AC want find-and exist-HN-POL

**Which type of apartment are you looking for?**

02 S: um:: ce-nun cikum, ama cey: sey myeng chinkwu-lang kathi,  
um I-TP now probably my three CNT friend-with together

03 -> kathi sa-l-ko siph-nuntey [HL%]  
together live-RL-and want-untey

**Um, now, I, want to live with three of my friends,**

04 ku ney myeng sa-l-ko iss-nun pang chac-ko iss-ko,  
that four CNT live-RL-and stay-TP room find-and stay-and



- 05 e: ku::: cokum::: (.) kyoytong-i kakka-un hako:  
uh that a.little traffic-SBJ close-RL and
- 06 yelekaci phyenuicem ku philyoha-n cangso-ey  
various amenity that need-RL place-in
- 07 kakka-un aphathu chac-ko iss-eyo.  
close-RL apartment find-and stay-POL

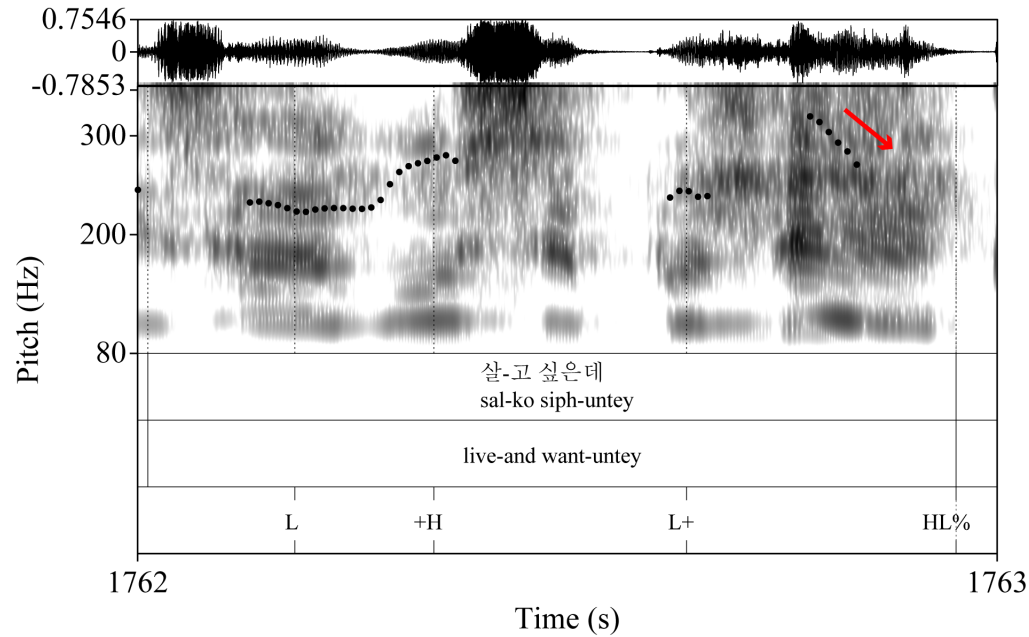
**uh um I am looking for an apartment close to public transportation and various amenities.**

-----

- 01 IR: 세라 씨는 어떤 종류의 아파트를 원하-찾고 계세요?  
02 S: 음:: 저는 지금, 아마 제: 세 명 친구랑 같이,  
03 -> 같이 살고 싶-은데 [HL%]  
04 그 네 명 살고 있는 방 찾고 있고,  
05 어:: 그::: 조금::: (.) 교통이 가까운 하고:  
06 여러가지 편의점 그 필요한 장소에  
07 가까운 아파트 찾고 있어요.  
(S continues))

When talking about the capacity of the apartment, Sarah provides background information about the number of people who will move in together (lines 2-3), and subsequently talks about preferences at lines 4-7. The background information is marked with clause-final *untey* and HL% as shown in the figure below.

Figure 3.3 Pitch contour of HL% on *-untey*



In Example 3.16, clause-final *nuntey* is combined with the polite ender *yo*.

Intermediate speaker Sam is asked to talk about his Korean friends. The interviewer asks how Sam met his Korean friends in line 5 and Sam responds starting in line 6.

#### Example 3.16

01 IR: hoksi, chinha-n hankwuk chinkwu-to iss-usey-yo?  
by.any.chance close-RL Korean friend-also have-HN-POL

**By any chance, do you have Korean friends who are close to you?**

02 S: ney.

**Yes.**

03 IR: ney. manhi iss-usey-yo?  
ok many have-HN-POL

**Okay, do you have many friends?**

04 S: ney:: ney::.

**Yes. Yes.**

05 IR: ney. ettehkey a-l-key toy-si-ess-eyo?  
okay how know-RL-AD become-HN-PST-POL

**Okay. How did you come to know them?**

06 S: a:: potong-un sayntieyko-ey, e:: kwukceyhaksayng::.  
ah usually-TP San.Diego-in uh international.student

07 -> manh-untey-yo. [HL%]  
many-untey-POL

**Uh usually there are many international students in San Diego.**

08 yenge kongpwuha-le a sayntieyko-ey o-pnita.  
English study-to um San.Diego-to come-DEF

09 a:: kulayse, kulen, hankwuk haksayng-tul-un, yeki wa-se,  
um so such Korean student-PL-TP here come-and

10 a:: talu-n chinkwu-lo. a:: talu-n chinkwu-ka kulen haksayng  
uh different-RL friend-through ah different-RL friend-SBJ such student

11 e ce-hanthey a sokayha-ko, a:: cal a:: chinkwu hay-yo.  
eh me-to ah introduce-and ah well ah friend be-POL

**Uh so my other friends introduced the Korean students (who came to study English) to me and we easily became friends.**

12 IR: ney. a-l-kyess-supnita  
okay know-RL-will-DEF

**Okay, I see.**

-----  
01 IR: 혹시, 친한 한국 친구도 있으세요?

02 S: 네,

03 IR: 네. 많이 있으세요?

04 S: 네:: 네::.

05 IR: 네 어떻게 알게 되셨어요?

06 S: 아:: 보통은 샌디에고에, 어:: 국제학생::.

07 -> 많-은 데-요. [HL%]

08 영어 공부하러 아 샌디에고 옵니다.

09 아:: 그래서, 그런, 한국 학생들은, 여기 와서,



and a continuing boundary tone H%. Example 3.17 is excerpted from the interview with intermediate speaker Kelly who describes her husband's appearance in detail (e.g., hair color, height, hairstyle) in response to the interviewer's question at lines 1-2.

Example 3.17

01 IR: (...) namphyen pwun-ui elkwul-ul, ce-hanthey caseyhakey  
 husband person-POSS face-AC me-to in.detail

02 selmyeng com hay cwu-sey-yo.  
 explain a.little do give-HN-POL

**Please describe your husband's face appearance in detail to me.**

03 K: ney. ney. a:: wuli namphyen-un:: let's see. a:: um:::: hum:::: hhh ha .h  
 okay okay ah our husband-TP let's see ah um hmm hhh ha .h

**Okay. Okay. Uh:: my husband is, let's see, uh um hmm hhh ha .h**

04 meli (0.1) kkaman-sayk, um:: ku:: kkaman-sayk-hako ku:: ankyeng ssu-ko,  
 hair black-color um that black-color-and that glasses wear-and

**His hair is black, um uh is black and he wears glasses and,**

05 khi-ka:::: khi-ka potong::, khu-ci anha::, ku cak-ci anh-ayo,  
 height-SBJ height-SBJ average tall-NML not that short-NML not-POL

**His height is average, he's not tall, um he's not short.**

06 ku:::: e:: a let's see. a ssangkkephul:: iss-eyo. cayensulewu-n  
 that uh ah let's see ah double.eye.lids have-POL natural-RL

07 ssangkkephul (h)iss(h)-e(h)yo. e:: kuliko, molla-yo. e:: um::::  
 double.eye.lids have-POL uh and not.know-POL uh um

uh let's see. uh he has double eye lids. Natural. He has natural double eye lids. And I don't know. Uh um,

08 ttwungttwungha-ci anh-ko, potong-i-eyo. yey. ku:: (0.1) .h let's see. um::::  
 fat-NML not-and average-be-POL yes that let's see

**He's not fat but he's average. Yes. uh let's see. um,**

09 -> ney. meli-ka:: kkopsulmeli cokum ccokkum iss-**nutey-yo** [H%]  
 okay hair-SBJ curly a.little a.little have-nuntesy-POL

**He has curly hair.**

10 yey. nemwu- yey. yey. hhhh yey. kkuthna-ss-supnita.  
okay. very- okay. okay. hhhh okay. finish-PST-DEF

**Okay. very- okay. okay. I'm finished.**

11 IR: ney, kamsaha-pnita. ney. a-l-kyess-supnita.  
okay thank.you-DEF okay know-RL-will-DEF

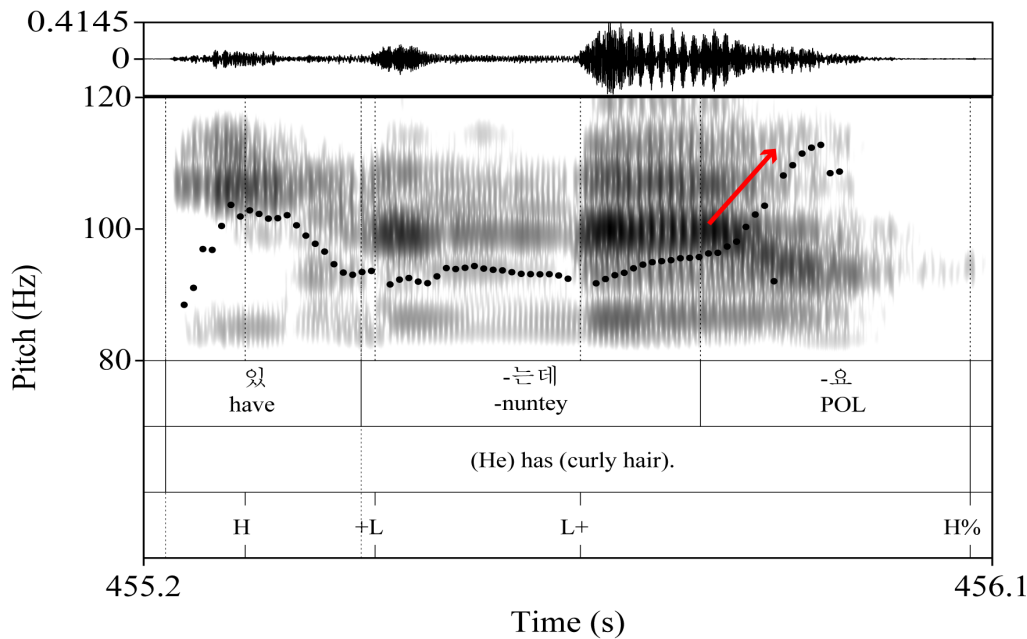
**Okay, thank you. Okay, I see.**

-----  
01 IR: (...) 남편 분의 얼굴을, 저한테 자세하게  
02 설명 좀 해주세요,  
03 K: 네. 네. 아:: 우리 남편은:: let's see. 아:: 음::: 흠::: hhh ha .h  
04 머리, (0.1) 까만색, 음:: 그:: 까만색하고 그:: 안경 쓰고,  
05 키가::: 키가 보통::, 크지 않아::, 그:: 작지 않아요,  
06 그::: 어:: 아 let's see. 아 쌍꺼플:: 있어요:: 자연스러운  
07 쌍꺼플 h 있 h 어 h 요. 어:: 그리고, 몰라요. 어:: 음:::  
08 뚱뚱하지 않고, 보통이에요. 예. 그:: (0.1) .h let's see. 음:::  
09 -> 네. 머리가:: 뺨슬머리 조금 쪼끔 있-는데-요 [H%]  
10 예. 너무- 예. 예. hhhh 예. 끝났습니다::  
11 IR: 네, 감사합니다. 네. 알겠습니다,

Kelly describes her husband's curly hair at the end of the description (line 9). Note that the last part of her description ends with *nuntey-yo*; no further foreground information comes afterwards. That is, whereas *nuntey-yo* occurs toward the beginning of the responses in previous examples, *nuntey-yo* occurs near the end of the response in this example. In addition to the position of *(nu)nuntey-yo*, the content of the *nuntey-yo* sentence is not background information but foreground information responding to the interviewer's question (i.e., Kelly describing her husband's curly hair). Although *nuntey-yo* and H% project further description, its position in the response and meaning in 3.17 do not project subsequent talk. This mismatch obscures the turn boundary. Moreover, the H% realized on *nuntey-yo* prosodically projects further talk and the adverb *nemwu*

‘very’ syntactically projects an adjectival predicate. However, no further description follows after the adverb, which instead is cut off (line 10). Kelly has to explicitly express that her turn is finished at line 10 (*kkuthna-ss-supnita* ‘(my talk) has finished.’), rather than the turn being naturally followed by the interviewer’s next turn. Figure below shows H% realized on *yo* of *iss-nuntey-yo*.

Figure 3.5 Pitch contour of H% on *nuntey-yo*<sup>7</sup>



### 3.3.1.2 In requests

(Nu)n<sup>tey</sup> is also employed to provide background information for upcoming pre-requests. For example, when speakers schedule a doctor’s appointment in a role-play context, they do not directly and overtly make the request by saying, “Please make an appointment for an X-ray,” but

<sup>7</sup> The initial-H followed by +L at the beginning of an AP is not acceptable tonal sequence in Korean intonation. The production of H on a vowel-initial AP and L on the AP-second syllable suggests the speaker’s mastery of Korean intonation is weak.

instead carry on preliminary work. That is, they make a pre-request asking about the availability of the doctor and provide preliminary information for the pre-request using *(nu)ntey*, before the actual request.

In Example 3.18, advanced speaker Mike makes an appointment with the “doctor,” played by the interviewer. The role-play instructions asked the interviewee to make an appointment with the doctor (interviewer) by describing details about the interviewee’s (patient’s) current injuries after playing a sport. Thus, this made-up conversation may sound different from an actual conversation between a doctor’s office receptionist and a patient. In an authentic situation, the patient does not make an appointment with the doctor but with the receptionist, nor they describe their health condition in this detail to the receptionist to make an appointment.

#### Example 3.18

01 IR: ney. annyengha-sey-yo,  
yes hi-HN-POL

**Hi.**

02 M: ney. annyengha-sey-yo. e:: ecey aisuhakhi-lul ha-myense,  
yes hi-HN-POL um yesterday ice.hockey-AC do-while

03 e:: kalpipye-ka pwuleci-ess-eyo.  
um ribs-SBJ broken-PST-POL

**Hi. Um::: while I was playing ice hockey yesterday, um::: my ribs were broken.**

04 -> kulayse eyksuleyi-lul com pat-ko siph-untey, [HL%]  
so X.ray-AC a.little receive-and want-unt

**So I want an X-ray.**

05 pre-> hoksi sikan-i toy-sey-yo onul?  
by.any.chance time-SBJ become-HN-POL today

**Do you have time by any chance?**



- 06 IR: a ney. kuntey, cikum yeyyak-i kkwak cha-se,  
oh I.see but now reservation-SBJ fully made-so
- Oh, I see. But all our appointments are full,**
- 07 e. onul tangcang-un com an toy-l ke kath-ketun-yo?  
uh today immediately-TP a.little not possible-RL thing seem-CORREL-POL
- so it seems that (you cannot make an appointment) today right away.**
- 08 M: a::: kuntey com milu-l swu eps-nun mwuncey-i-n ke kath-ayo.  
oh but a.little delay-RL DN cannot-RL problem-be-RL thing seem-POL
- Oh but I don't think I can postpone the appointment.**
- 09 nemwu iltan emcheng manhi aphu-ko, kuliko meng-i tul-ese,  
very first.of.all extremely a.lot hurt-and and bruise-SBJ get-so
- very- first of all it hurts extremely a lot and, and I got bruised so,**
- 10 onul com kkok eyksuleyi-lul pata-ya ha-nun ke kath-ayo.  
today a.little certainly X.ray-AC examined-must do-RL thing seem-POL
- It seems that I must be examined today.**
- ((lines omitted))
- 15 IR: a, kule-sey-yo, kulemyen cey-ka, onul-un,  
oh is.that.so-HN-POL then I-SBJ today-TP
- 16 tases si-kkaci sikan-i ta cha iss-ketun-yo.  
five hour-until time-SBJ all fill exist-you.see-POL
- Oh, is that so? today my appointments are full until 5pm.**
- 17 M: ney.
- Yes.**
- 18 IR: ku ttay-kkaci com kitali-si-l swu issu-si-l ke kath-ayyo? animyen.  
that time-until a.little wait-HN-RL DN can-HN-RL thing seem-POL or
- Do you thing you can wait until then? Or,**
- 19 M: yey. tases si-ey ha-l swu iss-eyo. kulayse ku sikan-ey.  
ok five hour-at do-RL DN can-POL so that time-at
- 20 com yaysok-ul hay cwu-si-l swu iss-umyen acwu coh-un ke  
a.little appointment-AC do give-HN-RL DN can-if very good-RL thing
- 21 kath-ayo.

seem-POL

**Yes, I can do it at 5pm. if I could make an appointment at that time, it would be very appreciated. (request)**

22 IR: yey.

**Okay.**

-----

01 IR: 네. 안녕하세요,

02 M: 네. 안녕하세요. 어:: 어제 아이스 하키를 하면서,

03 어:: 갈비뼈가 부러졌어요.

04 -> 그래서 엑스레이를 좀 받고 싶-은데, [HL%]

05 pre-> 혹시 시간이 되세요 오늘?

06 IR: 아 네. 근데, 지금 예약이 꽉 차서,

07 어. 오늘 당장은 좀 안 될 거 같거든요?

08 M: 아:: 근데 좀 미룰 수 없는 문제인 거 같아요.

09 너무 일단 엄청 많이 아프고, 그리고 멍이 들어서,

10 오늘 좀 꼭 엑스레이를 받아야 하는 거 같아요.

((lines omitted))

15 IR: 아, 그러세요, 그러면 제가, 오늘은,

16 5시까지 시간이 다 차 있거든요, (.)

17 M: 네.

18 IR: 그때까지 좀 기다리실 수 있으실 거 같아요? 아니면.

19 M: 예, 5시에 할 수 있어요. 그래서 그 시간에.

20 좀 약속을 해주실 수 있으면 아주 좋은 거

21 같아요.

22 IR: 예.

The *nuntey* clause is subordinated to the pre-request in the main clause (line 5) and expresses Mike's wanting an X-ray (line 4). In the pre-request, Mike inquires about the doctor's availability: "Do you have time today?" (line 5). A "do you have X" format is often used as a pre-request which asks about preconditions of requested targets (Levinson, 1983; Schegloff, 2007). For example, in 3.19, before the actual request, Speaker A asks about the availability of the blackberry jam in "Do you have X" format (line 1). After a go-ahead "yes" from Speaker B, A makes the request in line 3. If B's response at line 2 was "no," A might not make the request.

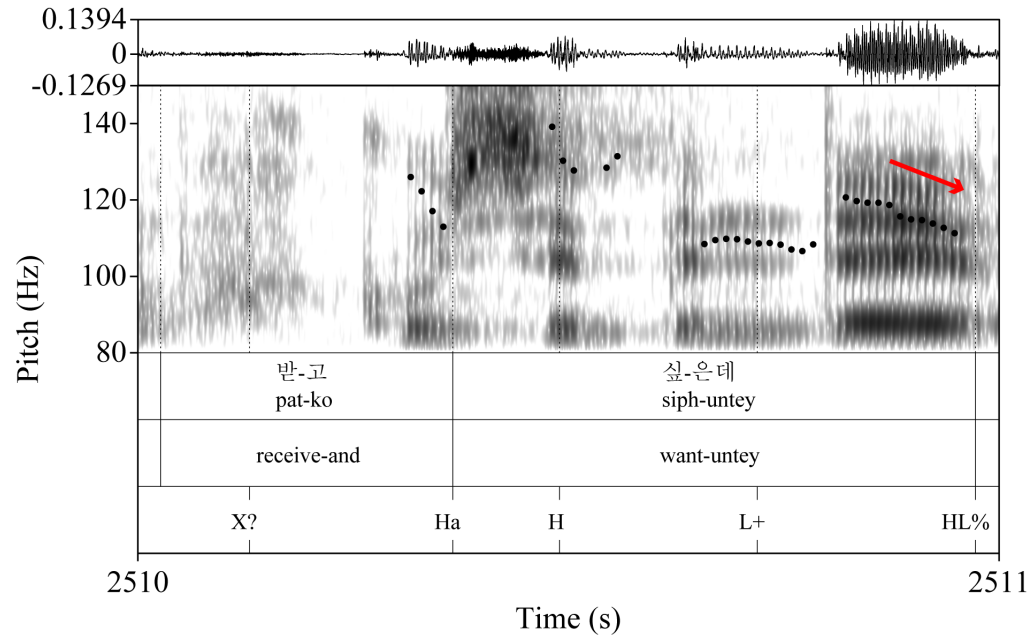
Such a pre-request projects the subsequent occurrence of a request and helps the requester avoid being rejected by the other party.

### Example 3.19

- 01     A:     *Do you have blackberry jam?*  
02     B:     *Yes.*  
03     A:     *Okay. Can I have half a pint then?*  
04     B:     *Sure.*

Returning to 3.18, the doctor declines the potential request by saying that the day's schedule is already full (lines 6-7). This shows that the doctor has interpreted lines 4-5 as a request for making an appointment rather than as a mere pre-request. Although the doctor declines the pre-request, Mike reinitiates the request sequence. He describes his injury more specifically and emphasizes how hurt he is (line 9). He also strongly asserts his need and urgency to be seen by the doctor (lines 8, 10). In response, the doctor repeats that appointments are full until 5 PM but then backs off a little by asking if Mike can wait until then (lines 15-16, 18). The actual request is produced at line 19-21 when Mike asks for a confirmation for the 5 PM appointment. The appointment has been set up between the speakers in line 22. Mike expresses his "preference" for getting the X-ray using the stem *-ko siph* 'would like to' (line 4) and then projects the upcoming pre-request asking about the doctor's availability (line 5). The *(nu)ntey*-clause in line 4 links the previous description of injury to the upcoming pre-request and provides reasons for the need for medical treatment. Without the *(nu)ntey*-clause, the pre-request would sound very abrupt and not well connected with the previous description. Prosodically, HL% realized on *untay* signals upcoming talk subsequent to the *(nu)ntey*-clause from the same speaker.

Figure 3.6 Pitch contour of HL% on *-untey*



It is interesting that the pre-request is heard as an actual request by the doctor, as can be seen from her declining to set up an appointment in Example 3.18. Fox (2014) points out that in service encounters, pre-requests often function as requests themselves immediately followed by the granting of the request. In the example below, S grants the request immediately after the pre-request made by C.

Example 3.20 (10) Bike shop 6-22-2013 333333 (in Fox, 2014)

- 1 C: do you ↑guys have a ↓restroom? (that)=
- 2 S: {points} =I do. it's right around the corner right [here
- 3 C: {pointing and walking} [right there?
- 4 (.)
- 5 S: yeah=
- 6 C: =(thanks/kay)

Consider a similar example below. As in the previous example, the interviewee was asked to make an appointment with the doctor by explaining his injury after playing a sport. In this role-play, advanced speaker Chris calls the doctor's office and talks with the doctor to make an appointment.

### Example 3.21

- 01 C: e ce, ku nongkwu-l ha-taka,  
um that that basketball-AC do-while  
**Um uh uh while I was playing basketball,**
- 02 palmuk-ul, com tachi-n ke kath-untey,  
ankle-AC a.little hurt-RL thing seem-untey  
**it seems that my ankle got injured,**
- 03 ku:: com ppi-ess-ketun-yo?  
that a.little sprain-PST-you.see-POL  
**it got sprained, you see?**
- 04 kulayse cikum, nemwu manhi pwu-ess-ko,  
so now too much swell-PST-and  
**so my ankle is swollen a lot now**
- 05 -> cikum ama uysa:: ppalli pwa-ya toy-l ke kath-untey [LHL%]  
now maybe doctor quickly see-must become-RL thing seem-untey  
**I think I must see a doctor as soon as possible,**
- 06 pre-> e hoksi, onul sikan issu-sey-yo?  
uh by.any.chance today time have-HN-POL  
**uh do you have time today by any chance?**
- 07 com pwa-cwu-l swu iss-nun sikan-i issu-sey-yo?  
a.little see-give-RL DN can-RL time-SBJ have-HN-POL  
**do you have time to see me?**

- 08 IR: a kule-sey-yo? kulentey cey-ka onul-un,  
oh is.that.so-HN-POL but I-SBJ today-TP
- Oh is that so? But today I,**
- 09 yeyyak-i kkwak cha iss-nuntey ettehkey ha-cyo?  
appointment-SBJ fully fill exist-nuntey how do-COMM
- I'm afraid my appointments today are fully booked.**
- 10 C: kulemyen, encey encey ceyl ppalukey pwa cwu-si-l swu issu-sey-yo?  
then when when the.most early see give-HN-RL DN can-HN-POL
- Then, when is the earliest time you can see me?**
- 11 IR: e ce-nun nayil twu si cengto-pwuthe sikan-i  
um I-TP tomorrow two hour around-from time-SBJ
- 12 pi-l ke kath-ayo.  
free-RL thing seem-POL
- Um I think I have a time tomorrow at 2PM.**
- 13 C: ney. kulemyen, nayil twu si-kkaci,  
okay then tomorrow two hour-to
- Okay, then I'll go there at two tomorrow.**
- 14 nay-ka ku:: cikum manhi aphu-ntey, ku:: mwe:: hay cwu-l swu iss-nun-  
I-SBJ that now a.lot hurt-ntey that what do give-RL DN can-RL
- It hurts a lot; can you do something for me?**
- 15 e ha-l swu iss-nun ke eps-na-yo? ku:: ce susulo-yo?  
um do-RL DN can-RL thing not.have-Q-POL that that myself-POL
- Is there anything I can do myself?**
- 16 IR: a kulemyenun keki palmol-ey elum:: ccimcil com  
oh then there ankle-on ice massage a.little
- 17 ha-ko kyey-si-myen kwaynchanh-ul ke kath-ayyo,  
do-and stay-HN-if good-RL thing seem-POL
- Oh, then, it would be good if you do ice massage on your ankle.**
- ((lines omitted))
- 23 C: a kulemyen, ku:: twu si nayil twu si::  
oh then that two hour tomorrow two hour

- 24           manna-nun ke-l-lo hap-sita.  
meet-RL   thing-RL-by DEF
- 25    IR:    kulemyen ku ttay   ce-hanthey han pen yenlak cwu-sey-yo.  
then       that time I-to           one time call   give-HN-POL
- Then, call me when you come.**
- 26    C:     a ney a-l-kyess-supnita.  
oh okay see-RL-will-DEF
- Oh, okay, I see.**

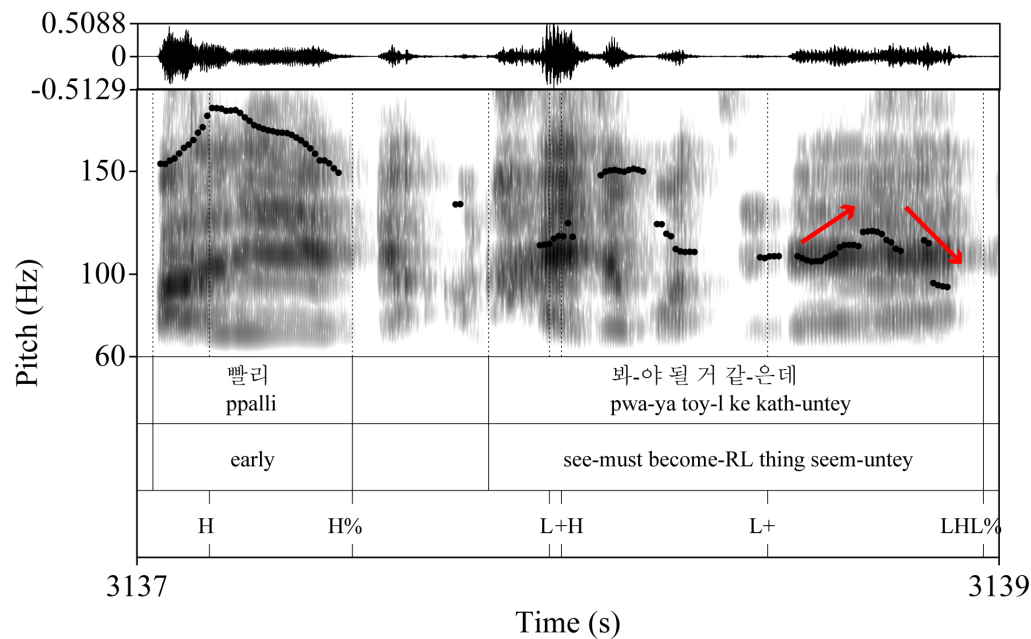
-----

- 01    C:     어 저, 그 농굴 하다가,  
02           발목을, 좀 다친 거 같은데,  
03           그:: 좀 빠졌거든요?  
04           그래서 지금, 너무 많이 부었고,  
05       -> 지금 아마 회주 의사:: 빨리 봐야 될 거 같-은데 [LHL%]  
06    pre-> 어 혹시, 오늘 시간 있으세요?  
07           좀 봐줄수있는 시간이 있으세요?  
08    IR:    아 그러세요? 그런데 제가 오늘은,  
09           예약이 딱 차 있는데 어떻게하죠?  
10    C:     그러면, 언제 언제 쯤 빠르게 봐주실수 있으세요?  
11    IR:    어 저는 내일 두시정도부터 시간이  
12           빌거같아요,  
13    C:     네. 그러면, 내일 두시까지,  
14           내가 그:: 지금 많이 아픈데, 그:: 뭐:: 해줄수있는,  
15           어 할수있는 거 없나요? 그:: 저 스스로요?
- 16    IR:    아 그러면은 거기 발목에 얼  
17           음:: 찢질 좀 하고 계시면 괜찮을 거 같애요,  
          ((lines omitted))
- 23    C:     아 그러면, 그:: 두시 내일 두시::  
24           만나는 걸로 합시다.  
25    IR:    그러면 그때 저한테 한번 연락주세요,  
26    C:     아 네 알겠습니다.

Chris describes his injury (lines 1-4) and talks about his wish to see the doctor in the *untey* subordinate clause (line 5). Then, he inquires about the availability of the doctor in the pre-request in the main clause (lines 6-7). Responding to the pre-request, the doctor declines to make

an appointment by saying that all appointments are booked that day (line 8-9). Chris asks the earliest time the doctor could see him and the doctor responds (lines 10-12). Chris also asks about self-treatments that he can do at home before the appointment and the doctor suggests one (lines 13-17). Chris confirms the appointment time and the doctor asks for him to call before he comes to the office (line 23-26). Similar to the previous example, the *untey* clause connects the previous description of the current injury to the pre-request. The speaker realizes LHL% on *untey*.

Figure 3.7 Pitch contour of LHL% on *-untey*



As has been seen, a *(nu)ntey* clause provides information relevant to the pre-request in the main clause. Boundary tones coupled with *(nu)ntey* (e.g., HL% or LHL%) project the occurrence of a subsequent pre-request asking for the availability or possibility of a reservation or appointment and signal turn continuation while maintaining the interlocutor's attention.



### 3.3.2 Tone mitigator with H% and LH%

Similar to native speakers of Korean, Korean L2 speakers use *(nu)ntey* in sentence-final position in dispreferred contexts when displaying disagreement, complaint, or denial toward the previous speaker's talk. In such contexts, the speaker is possibly involved in a face-threatening situation and he/she attempts to minimize its face-threatening effects by using linguistic and prosodic devices. *(Nu)ntey* is one such device and co-occurring intonation is also used to achieve such an effect. However, considering that the data comes from interviews consisting of question-response interactions, which lacks certain contexts such as disagreeing or complaining, only a few instances of *(nu)ntey* were found in the role-plays.

In Example 3.22, the interviewer asks advanced speaker Mike to role-play being a patient who was injured while playing a sport and to make an appointment with the doctor on the phone; the interviewer plays the role of the doctor. Previous to this excerpt, the appointment time was about to be settled. In this excerpt, they are talking about insurance coverage.

#### Example 3.22

01 IR: chilyopi-nun pohem-i an toy-l ke kath-untay  
medical.expense-TP insurance-SBJ not covered-RL thing seem-but

02 ette-sey-yo?  
how-HN-POL

03 F: -> **Also, it seems that medical expense will not be covered, is it okay?**  
cepen-ey pohem-i toy-ess-**nuntay**, [LH%]  
last.time-at insurance-SBJ covered-PST-nuntay

**Last time, the expense was covered by insurance...**

04 (1.0)

05 mwe-ka pakkwi-ess-eyo (hh)?  
something-SBJ change-PST-POL

**Has something changed?**

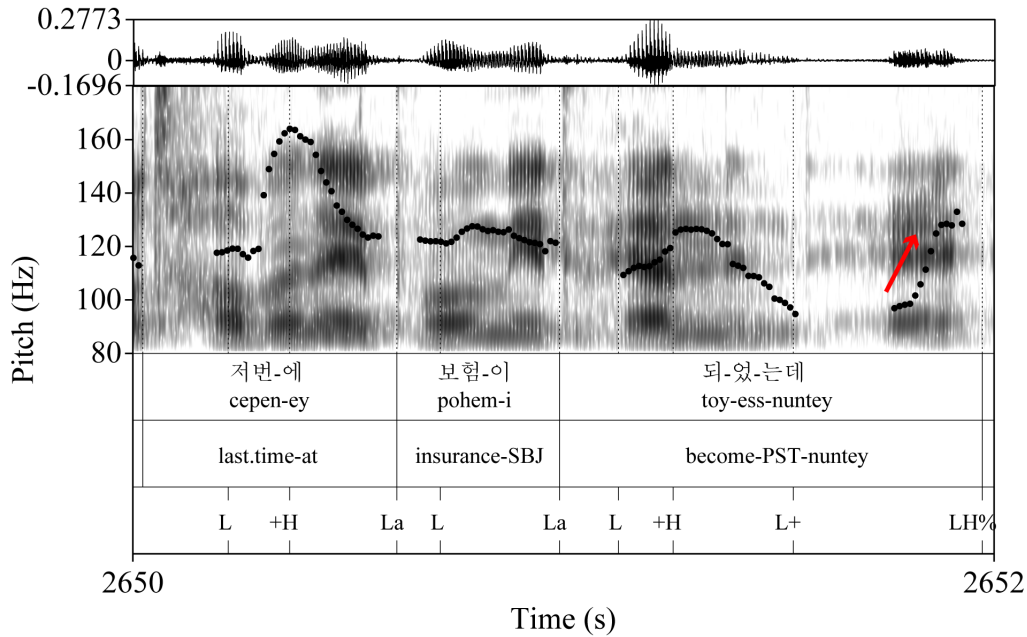
- 06 IR: a kule-sey-yo cehui pyengwen-eyse-nun  
oh that-HN-POL our hospital-in-TP
- 07 kulen sangche-nun pohem-i an-toy-ketun-yo.  
that injury-TP insurance-SBJ not-covered-you.see-POL
- Oh is that so? That kind of injury will not be covered by insurance.**
- 08 F: pohem-i an toy-myen chilyopi-ka  
insurance-SBJ not covered-if treatment.fee-SBJ
- 09 kwucecekulo enu cengto toy-nun ke-yeyyo?  
specifically which extent become-RL thing-POL
- If it is not covered, specifically how much the treatment fee will be?**
- 10 IR: han sampayk pwul nao-l ke kath-untey-yo?  
approximately three.hundred dollar charge-RL thing seem-untey-POL
- It will be approximately \$300.**
- 11 F: e sampayk pwul-i-myen kwaynchanh-ayo.  
um three.hundred dollar-be-if okay-POL
- If it's \$300, it will be fine,**
- 12 cehuy apeci-ka pwuca-nikka. (hh)  
our father-SBJ wealthy.person-because.
- because my father is wealthy.**

-----

- 01 IR: 그리고 치료비는 보험이 안 될 거 같은데  
02 어떠세요?
- 03 F: -> 저번에 보험이 되-었-는데 [LH%]  
04 (1.0)  
05 뭐가 바뀌었어요(hh)?
- 06 IR: 아 그러세요? 저희 병원에서는  
07 그런 상처는 보험이 안되거든요?
- 08 F: 보험이 안되면 치료비가  
09 구체적으로 어느 정도 되는거예요?
- 10 IR: 한 300 불 나올 거 같은데요
- 11 F: 어 300 불이면 괜찮아요
- 12 저희 아버지가 부자니까 (hh)

Portraying the doctor, the interviewer says that insurance will not cover the visit and asks whether Mike still wants to come into the doctor's office (lines 1-2). Before responding to the question, Mike reminds the doctor that he had a similar medical treatment covered by insurance last time and problematizes the doctor's previous talk using *nuntey* (line 3), indirectly showing his skepticism and dissatisfaction. Note that LH% is realized on *nuntey*. The H in LH% mitigates the doctor's possible interpretation of his message as a strong complaint or challenge. In addition, with the interlocutor-oriented H, Mike invites the doctor to infer the unspoken message from the omitted main clause, namely, 'I don't understand why the medical expense is not covered by insurance this time'. The one-second pause after the *-nuntey* [LH%] utterance indicates that Mike waits for the doctor to take his turn and respond to the indirect complaint. Receiving no response from the doctor with the *nuntey* utterance, rather than just waiting for the doctor to infer his meaning and explain the insurance issue, this time Mike poses the information-seeking question directly, asking if something has changed in the hospital insurance system (line 5). The doctor subsequently briefly acknowledges Mike's statement ('oh, is that so?') but then repeats the same claim ('That kind of injury will not be covered with insurance'), avoiding giving an exact answer. The doctor dodges the responsibility imposed by the previous *nuntey* utterance and the question by choosing not to respond to the LH% or to give a precise reply to the question. Mike asks another question regarding treatment fees (line 8-9) and receives a response (line 10). Then, Mike says that he is okay with his treatment not being covered by the insurance because his father is wealthy (lines 11-12). Figure 3.8 illustrates LH% realized on *nuntey*.

Figure 3.8 Pitch contour of LH% on *-nuntey*



A similar example appears in a role-play with advanced speaker Tim. The interviewer acts as a salesperson while Tim acts as a customer returning a jacket. Tim was asked to return the clothes but the interviewer continues to challenge him by giving various reasons for not returning the clothes.

### Example 3.23

01 T: cepen cwu-ey yeki cakheys-ul han pel sa-ss-nuntey-yo,  
last week-in here jacket-AC one CNT buy-PST-nuntey-POL

**I bought a jacket here last week,**

02 cip-ey ka-ss-teni ani cip-ey ka-se yele-po-ass-teni  
home-at go-PST-then no home-at go-and open-try-PST-then

**and I went home, no, I went home and opened (the wrapping),**

- 03 ku an-ey ku chen-i ccicecye-iss-ess-eyo.  
that in-LOC that cloth-SBJ torn-exist-PST-POL
- the cloth was torn inside.**
- 04 IR: ney.  
**Okay,**
- ((lines omitted))
- 08 T: hoksi hwanpwulha-l: swu iss-ul-kkayo?  
by.any.chanve return-RL DN can-RL-POL
- By any chance, can I return (the jacket)?**
- 09 IR: kulentey ku chen-i sonnim-i  
but that clothes-SBJ customer-SBJ
- 10 T: yey.  
**Yes.**
- 11 IR: sal ttay cciceci-n ken-ci sa-ko na-n hwu-ey  
buy when tear-RL thing-whether buy-and then-RL after-LOC
- 12 cciceci-n ke-n-ci cehuy-ka  
tear-RL thing-RL-whether we-SBJ
- 13 hwakinha-l pangpep-i eps-nuntey kulayse hwanpwul-ul  
verify-RL way-SBJ not.have-nuntey so return-AC
- 14 hay tuli-l swu-n eps-ketun-yo?  
do give-RL DN-TP cannot-you.see-POL
- However, we cannot verify when the jacket was torn either before your purchase or after. So we cannot take it back.**
- 15 T: a kulay-yo? ceki sa-ss-ul ttay ku cikwen-i-ka  
oh is.that.so-POL there buy-PST-RL when that employee-SBJ-SBJ
- 16 ku cikwen-i  
employee-SBJ
- Oh yeah? When I bought it one of the salespersons,**
- 17 IR: ney.  
**Yes.**
- 17 T: ku yengswucung-man kac-ko o-myen  
that receipt-only bring-and come-if

18 mwe sam il an-ey etten mwuncey-ka iss-telato  
what three day within-LOC any problem-SBJ have-in spite.of

19 -> hwanpwulha-l swu iss-ta-ko ha-ss-nuntey-yo? [H%]  
return-RL DN can-DC-QT say-PST-nuntey-POL

**said that within three days with a receipt I can return items in any condition.**

-----

01 T: 저번주에 여기 자켓을:: 한 벌 샀는데요,  
02 집에 갔더니:: 아니 집에 가서 열어봤더니,  
03 그 안에:: 그 천이 찢어져있었어요.

04 IR: 네,  
((lines omitted))

08 T: 혹시 환불:: 할 수 있을까요?

09 IR: 그런데 그 천이 손님이

10 T: 예.

11 IR: 살 때 찢어진 건지 사고 난 후에  
12 찢어진 건지 저희가  
13 확인할 방법이 없는데 그래서 환불을  
14 해 드릴 수는 없거든요?

15 T: 아 그래요? (“Oh really”) 저기 샀을 때 그 직원이가  
16 그 직원이

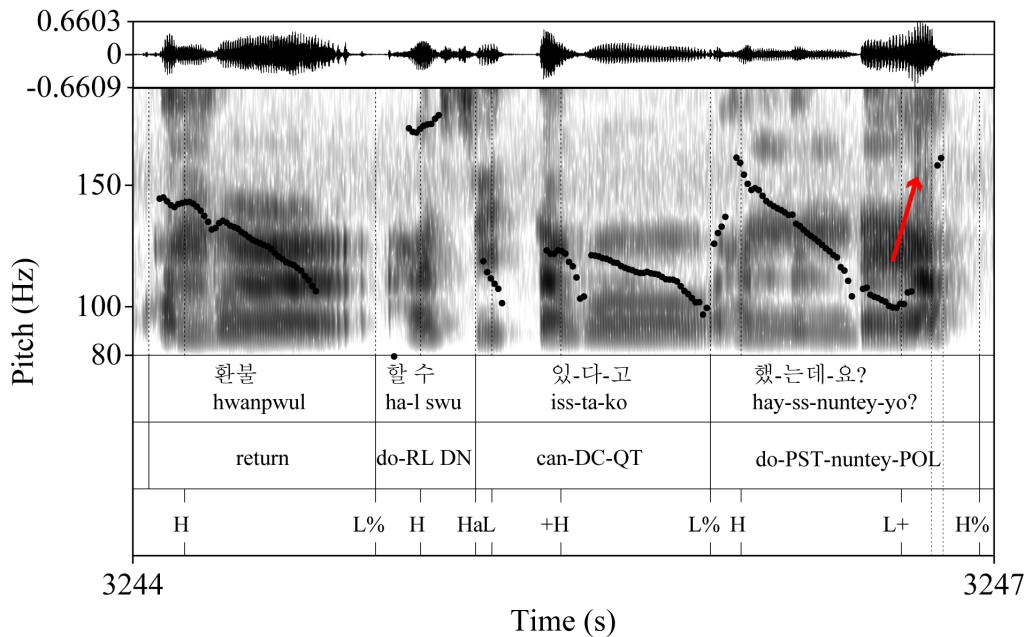
17 IR: 네

18 T: 그 영수증만 갖고 오면  
19 뭐 삼 일 안에 어떤 문제가 있더라도  
20 -> 환불할 수 있다고 했는데요? [H%]

In the excerpt, Tim says that he found out that the jacket he bought last week was torn in the box when he got back home, implying that the jacket was torn even before he actually tried it on (lines 1-3). The interviewer, acting a store clerk, does not take action but produces a go-ahead *ney* ‘okay’ (line 4), leading Tim to explicitly make a request (line 8). Tim asks if it is possible to return the jacket. The salesperson, however, denies it by saying that she cannot know whether the jacket was destroyed before or after Tim bought it (lines 9, 11-14). In response, Tim contradicts the clerk by stating the return policy, which he had heard from another employee at the store (lines 16, 18-20). The policy is stated in a reported speech format with the reporting verb *ha-ta*

‘to say.’ By doing so, Tim challenges the store clerk with facts about the policy. However, the reporting verb is somewhat mitigated by *nuntey-yo* as in *ha-ss-nuntey-yo*. Using *nuntey*, Tim does not explicitly ask for a refund but makes the interviewer interpret the unsaid message ‘Because the store clerk previously said that a return is possible in any condition if I bring a receipt within three days from the purchase, (I want you to let me return my jacket).’ The message is indirectly conveyed. H%, the interlocutor-oriented tone, elicits a response from the interviewer; it displays the speaker’s tentativeness or indirectiveness by passing the turn to the interlocutor. H% also indicates the speaker’s low degree of certainty about the content in the utterance; the delivery of the reported speech shows Tim’s uncertainty about the store policy at the same time that he is quoting it as an authority. Ultimately, Tim receives free mending for the jacket.

Figure 3.9 Pitch contour of H% on *-nuntey*



While advanced speakers display a dispreferred stance toward the previous speaker's talk with *(nu)n-tey*, intermediate speakers often use *(nu)n-tey* to express linguistic difficulties. When they cannot continue the topic in Korean they use *(nu)n-tey* as a delaying device. Consider the following example with intermediate speaker Sam. The interviewer asks about Sam's job tasks as a software company president (line 3); Sam cannot easily describe his job in Korean.

Example 3.24

01 IR: cikum mwusun il ha-ko kyey-sey-yo?  
now what work do-and stay-HN-POL

**What do you do?**

02 S: a:: ce-nun e:: sputuwueye hoysa sacang-i-pnita.  
ah I-TP uh software company president-be-DEF

**I am a president of a software company.**

03 IR: a kule-sey-yo kulemyen cwulo etten il-ul ha-si-na-yo?  
ah that-HN-POL then usually which work-AC do-HN-Q-POL

**Oh yeah? Then, what kind of tasks do you do usually?**

04 S: -> etten il-un:: a: wuli:: hoysa-nun a:: a:: ike ccom elyewu-nuntey [LH%],  
ahahahaha  
some work-TP ah our company-TP ah ah this a.little difficult-nuntey

**Some tasks are ah our company has ah ah this question is a little bit difficult to answer.**

05 IR: hahahaha

06 S: a:: wuli: cikwen:: ey:: cikwen ey:: haa ettekey e::  
ah our employee uh employee em huh how uh

**Ah, our employees huh how can I explain? Uh no. no. I will try again.**

07 e ani-eyo. ani-eyo. tasi sicakha-l-kkey-yo.  
uh no-POL no-POL again start-RL-CNJ-POL

08 a:: kyeyyak a ssainha-ko e::  
ah contract ah sign-and uh



09 finance ettukey:: unhayng-ulo ka-se a:: ton maynicihay-ya toy-yo.  
 finance how bank-to go-and ah money manage-must become-POL

**Ah, I have to sign the contract, uh finance, how can I say, I have to go to the bank and manage finance.**

-----

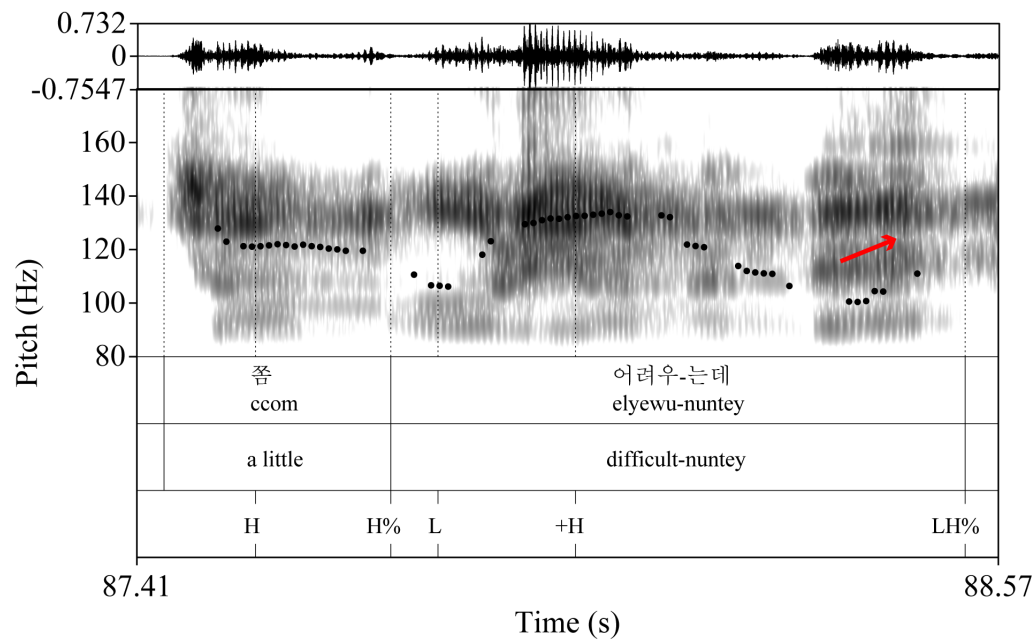
01 IR: 지금 무슨 일 하고 계세요?  
 02 S: 아:: 저는 어:: 소프트웨어 회사 사장입니다.  
 03 IR: 아 그러세요? 그러면 주로 어떤 일을 하시나요?  
 04 S: -> 어떤 일은:: 아: 우리:: 회사는 아:: 아:: 이거 좀 어려우는데 [LH%]  
 아하하하  
 05 IR: 흐흐흐  
 06 S: 아:: 우리: 직원:: 어 직원 에:: 하아 어떠케 어::  
 07 어 아니예요. 아니예요. 다시 시작할게요.  
 08 아:: 계약 아 싸인하고, 어::  
 09 finance 어뜨케:: 은행으로 가서, 아:: 돈 매니지해야돼요.

Sam's lack of linguistic competence from line 4 is indicated by ample evidence (line 4): restarts (from 'some tasks are' to 'our company is'), filler words such as 'ah', and elongations of words indicated with ':'. In addition, Sam expresses linguistic difficulty in literal terms: 'This question is a little bit difficult to answer,' ending with the sentence-final *nuntey* at line 4. His subsequent laughter *ahahaha* reveals the linguistically uncomfortable situation as well. His actual response to the question is delayed by line 4 (filler word, restart, laughter and the sentence ending with *nuntey*) and uttered starting in line 6. The H in LH% on *nuntey* elicits the interviewer's response, assisting Sam with formulating his answer. The rising boundary tone also makes the request indirect or tentative. Contrary to Sam's apparent strategy, the interviewer just laughs in response to the *nuntey* utterance rather than reformulating or changing the question to adjust to Sam's proficiency<sup>8</sup>. As a result, Sam has no choice but to restart his delayed response about his job responsibilities (lines 6-9). Sam not only delays his response but also elicits a response from the

<sup>8</sup> Interviewers were encouraged to continue the interview rather than correct or help with the interviewees' language based on the OPI guidelines (2012).

interviewer by orienting to himself as a language learner and the interviewer as the language expert. Figure 3.10 shows the rising boundary tone (LH%) realized in *nuntey*.

Figure 3.10 Pitch contour of LH% on *-nuntey*



Example 3.25 presents a similar example showing the use of *(nu)nuntey* for asking linguistic assistance. The interviewer asks for a detailed storyline of intermediate speaker Kelly's most recently watched movie. Kelly shows a lack of linguistic competence in answering the question.

### Example 3.25

01 IR: choykuneŋ mwusun yenghwa posi-ess-eyo?  
recently what movie watch-PST-POL

**Which movie have you seen recently?**

02 K: e:: ku wentelaysutu ( ) po-ass-nuntey caymiiss-ess-eyo.  
uh that NAME watch-PST-nuntey fun-PST-POL

**I have seen *Wanderlust* and it was fun.**

03 IR: ney. hoksi etten nayyong-i-ess-nunci  
okay. by.any.chance which storyline-be-PST-whether

04 caseyhi cwulkeli selmyenghay cwu si-kyess-eyo?  
in.detail storyline explain give HN-will-POL

**Okay. Could you explain the storyline in detail for me, please?**

05 K: ->ney. ok cokum elyewu-ntey hehehe  
okay ok a.little difficult-ntey

**Okay, it's a little difficult (to explain) but,**

06 IR: hhh[h

07 K: [ney. e::: ku::: han:: saylowu-n kyelhonha-n khephul:: (...)  
okay uh that one newly-RL marry-RL couple

**Okay. There was one newlywed couple,**

-----

01 IR: 최근에 무슨 영화 보셨어요?

02 K: 어:: 그 원더래스트 ( ) 봤는데, 재밌었어요.

03 IR: 네. 혹시, 어떤 내용이었는지

04 자세히 줄거리 설명해주시겠어요?

05 K: ->네. Ok. 조금 어려운 데. hehehe

06 IR: hhhh

07 K: 네. 어:: 그::: 한:: 새로운 결혼한. 커플:: (...)

She initially says 'yes' but then says that 'it is difficult (to explain),' ending with *ntey* in line 5.

Subsequent laughter also indirectly shows the difficulty. The actual response is delayed and occurs after line 6. Kelly positions herself as a language learner, but the interviewer does not provide linguistic support, leading Kelly to continue to respond by herself. Kelly returns to the interviewee's role and attempts to describe the storyline (line 7). Kelly's lack of linguistic competency is revealed by the filler words and word-final lengthening in her description of the

movie afterward as well. The boundary tone on *ntey* is not audible due to the overlapping laughter but other prosodic devices such as the small voice or laughing sound mitigate the dispreferred tone.

### 3.4 *Ketun* in second language discourse

As mentioned previously, although *ketun* can be used in both clause-final and sentence-final positions, it is more frequently used as a sentence-final particle in spoken contexts. In the interview with L2 speakers, only sentence-final *ketun* occurs. L2 speakers used sentence-final *ketun* to provide new information in two ways: 1) to provide supplementary information as parentheticals (Cf. Kim and Suh, 2010) and 2) to provide thesis statements for upcoming elaboration. The frequency of *ketun* in five boundary tones produced by speakers at intermediate and advanced levels is illustrated in Table 3.3.

Table 3.3 Distribution of boundary tones realized on *ketun* across speakers at intermediate and advanced levels

	Int.	Adv.
L%	0 (0%)	3 (9%)
H%	2 (100%)	26 (79%)
LH%	0 (0%)	0 (0%)
HL%	0 (0%)	3 (9%)
LHL%	0 (0%)	1 (3%)
Sum	2 (100%)	33 (100%)

As observed in Park and Sohn (2002), H% was the most frequent boundary tone used in both advanced and intermediate speakers' talk in the data. In the intermediate speakers' data, both tokens of *ketun* are realized with H%; in interviews with advanced speakers, 79% of *ketun* is used with H%. This indicates a strong relationship between *ketun* and H%. Table 3.4 shows the frequency of the boundary tones in two contexts produced by speakers at intermediate and advanced levels.

Table 3.4 Frequency of boundary tones realized on *ketun* across speakers at intermediate and advanced levels in two contexts

	Parenthetical		Thesis	
	Int.	Adv.	Int.	Adv.
L%	0	2	0	1
H%	2	13	0	13
LH%	0	0	0	0
HL%	0	1	0	2
LHL%	0	1	0	0
Sum	2	17	0	16

Advanced speakers used *ketun* in both contexts with a higher frequency whereas intermediate speakers used *ketun* only two times as parentheticals. H% was more frequently used than other boundary tones both in parentheticals and thesis statements.

### 3.4.1 As a parenthetical

In Example 3.26, advanced speaker Chris talks about his leisure activities (lines 1-2 & lines 4-5) and lists the activities.

Example 3.26

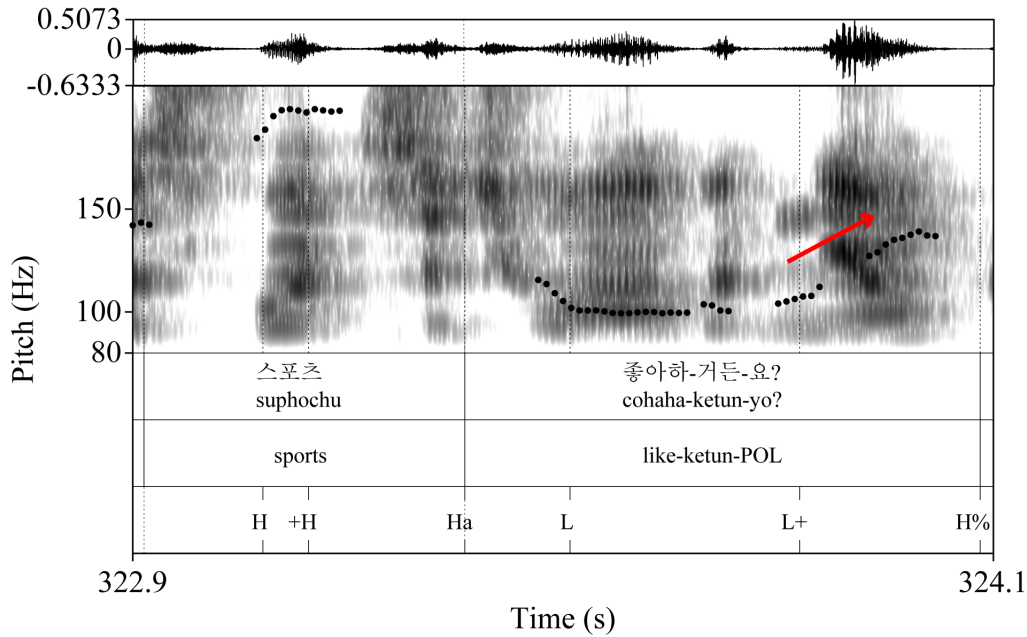
- 01 C: mwe yenghwa po-tenka umak kathi tut-kena  
 what movie watch or music together listen-or
- 02 uh:: mwe: sanchaykha-tunka mwe kathi wuntong-ul ha-tunka  
 uh what take.a.walk-either what together exercise-AC do-either
- Well, (I) watch movies or listen to music or uh well take a walk or um exercise (with my wife),**
- 03 -> ku suphochu cohaha-**ketun-yo**? [H%]=  
 that sports like-you.see-POL
- Well, I like sports you know?**
- 04 =kulayse suphochu-to manhi:: ha-ko  
 so sports-too a.lot do-and
- 05 mwe::: nongkwu-na chwukkwu-na uh:: kolphu-to ha-nuntey  
 what basketball-or soccer-or uh golf-also do-nuntey
- So I do sports a lot uh basketball or soccer or uh I also play golf and,**

-----

- 01 C: 뭐 영화 보든가:: 음악 같이 듣거나  
 02 어::: 뭐: 산책하든가 뭐 같이 운동을 하든가,  
 03 -> 그 스포츠 좋아하거든 요? H% =  
 04 =그래서 스포츠도 많이:: 하고  
 05 뭐::: 농구나 축구나 어:: 골프도 하는데...

In the inserted parenthetical at line 3, he provides supplementary information about his preference for sports, which is further elaborated subsequently at lines 4-5. In the insertion, *ketun* connects the previous and subsequent listing in a relevant manner. That is, whereas the hobbies are randomly listed at lines 1-2 before the insertion with *ketun*, the listing becomes relevant to sporting activities at lines 4-5 after the insertion. H% on *ketun-yo* signals the subsequent talk to ensue, which is the listing of sports. Figure below illustrates the rising H% on the final suffix *yo* of *ketun-yo*.

Figure 3.11 Pitch contour of H% on *-ketun*



Example 3.27 presents a similar use of *ketun*. Chris describes the rules of golf and the different usage of various golf clubs, responding to the interviewer’s question asking for a detailed explanation of the rules of the game.

Example 3.27

- 01 C: e hol sicakha-l ttay-mata tulaipe-pwuthe sicak-ul hay-se  
uh hole start-RL time-each driver-from start-AC do-and
- When playing each hole, the player uses the driver and,**
- 02 tulaipe-nun etten kolphuchay-i-nya-myen e ceuil meli:: e  
driver-TP which golf.club-be-Q-CONN uh most far uh
- 03 chi-l swu iss-nun e kolphu kong-ul chi-l swu iss-nun  
hit-RL DN can-RL uh golf ball-AC hit-RL DN can-RL
- 04 -> kolphuchay-i-**ketun-yo** [H%]? kelayse ku tulaipu ssu-l cal chi-nun  
golf.club-be-ketun-POL so that driver use-RL well hit-RL
- 05 salam-tul-un mwe:: sampayk yatu::na mwe ku cengto a  
person-PL-TP what three.hundred yard or what that degree ah

06 chi-l swu iss-nuntey e:: kuleko nase, e tulaibe-lul ssu-ko nase  
hit-RL DN can-nuntey uh then after uh driver-AC use-and then

**The driver is a golf club which can send the ball the farthest. So people who play golf well can send the ball about 300 yards and then uh after using the driver,**

07 mwe yelekaci aien-i-lanun kolphuchay-to iss-ko,  
what various iron-be-called golf.club-also exist-and

**There are various golf clubs called irons and,**

((lines omitted))

10 e:: kuleko nase? (...)  
um then after

**and then, (...)**

((C continues to describe))

-----

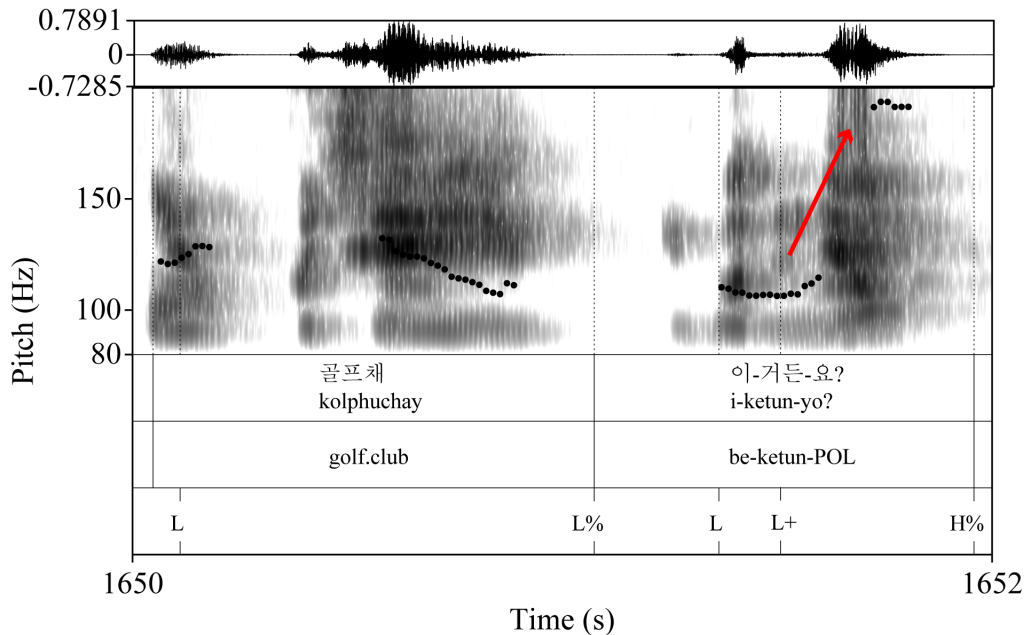
01 C: 어 홀 시작할때 마다, 드라이버부터 시작을 해서  
02 드라이버는 어떤 골프채이냐면 어 제일 멀리:: 어  
03 칠수있는 어 골프공을 칠수있는  
04 -> 골프채-이-거든-요 [H%] 그래서, 그 드라이브 쓸 잘 치는  
05 사람들은, 뭐:: 300 야드::나 뭐 그정도 아  
06 칠수있는데, 어:: 그리고 나서, 어 드라이브를 쓰고 나서,  
07 뭐 여러가지 아이언이라는 골프채도 있고,  
((irrelevant lines omitted))  
10 어:: 그리고 나서? (...)  
((C continues to describe))

Chris describes the general order of golf clubs used for finishing one hole. He first says that playing the hole begins with a club called a ‘driver’ *tulaibe-pwuthe sicak-ul hay-se* ‘the player uses the driver first and then,’ (line 1). Notice that the sequence of describing the game is momentarily halted starting in line 2 where Chris elaborates on features of the driver. In lines 2-6, Chris describes the driver as the club, which (among other types of clubs) sends the ball farthest,



and subsequently mentions the rough distance that an advanced golf player can drive the ball. Chris resumes describing the sequence of the golf game starting in line 6 and the resumption is lexically signaled. To continue the description, he uses the sequential adverb *kuleko nase* ‘and then’ and repeats the first sequence *tulaibe-lul ssu-ko nase* ‘after using the driver.’ Both expressions end with the suffix *nase* ‘and then,’ which projects the next action with another type of golf club, irons. The elaboration about the driver is parenthetically inserted in the course of the golf game descriptions ending with *ketun* and H% (lines 2-4). H%, in the parenthetical, projects subsequent talk within the same speaker’s turn. It also elicits the interlocutor’s attention to the subsequent portion of the talk.

Figure 3.12 Pitch contour of H% on *-ketun*



Example 3.28 shows another similar use of *ketun* in an insertion sequence. The interviewer asks the advanced speaker Liam about his favorite places in Korea. In response, he says he likes *Jeollado*, a southwest region in Korea, and lists reasons why he likes the region.

Example 3.28

01 IR: hankwuk-eyse etten cangso-lul thukpyelhi cohahay-se, cacwu  
Korea-in which place-AC especially like-so frequently

02 ka-si-n-ta-tunci mwe ilen kes-to iss-usey-yo?  
go-HN-RL-DC-whether what like.this thing-also have-HN-POL

**Do you have any place you go frequently because you especially like the place?**

03 L: um:: (.) cacwu ka-nun tey-ka, um:: manhi eps-nun ke kath-untey,  
hmm frequently go-RL place-SBJ um many not.have-RL thing seem-untey

04 cohaha-nun tey-ka cenlato-yeyyo.  
like-RL place-SBJ NAME-POL

**Um:: (.) the place I frequently go, um:: I don't have such places a lot but I like Jeollado.**

05 cenlato cohaha-nun ke kath-ayyo.  
NAME like-RL thing seem-POL

**I think I like Jeollado.**

06 toykey kyengchi coh-ko, e:: tungsanha-nun kes-to coh-ko,  
very scenery good-and um hike-RL thing-also good-and

**The scenery is very nice and um it's good to hike there and,**

07 -> e caknyen-ey yeswu eyksupho ka-ss-**ketun-yo**, [HL%]  
um last.year-LOC NAME expo go-PST-ketun-POL

**um I went to Yeosu Expo last year,**

08 keki toykey::: caymiiss-ess-ko, hyangilam tul-e-po-ass-eyo?  
there very fun-PST-and NAME hear-INF-try-PST-POL

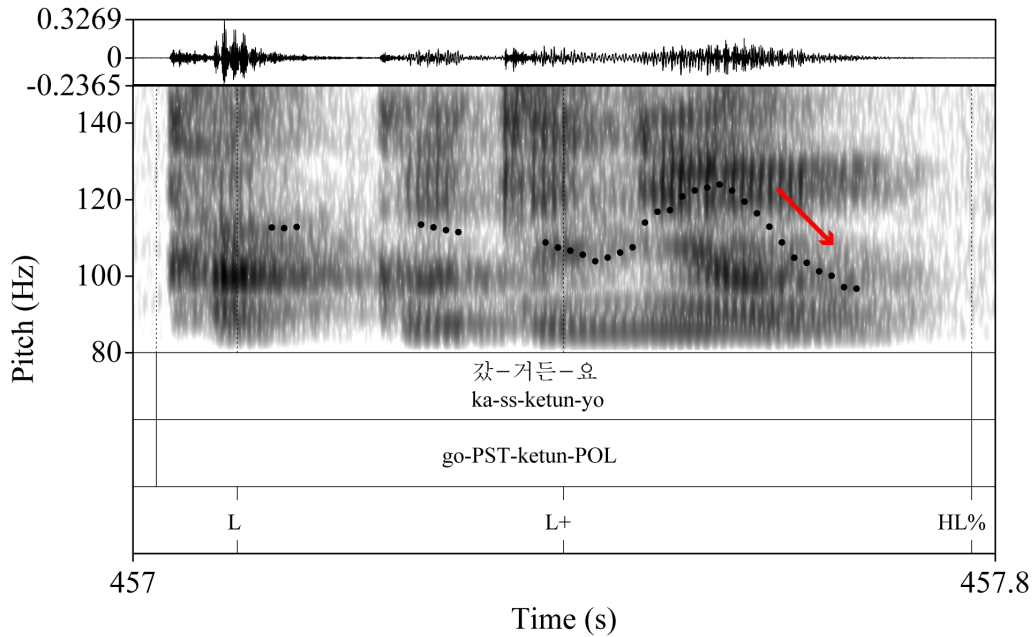
**It was very fun there and have you heard of Hyanilam?**



city in Jeollado. The experience at the *Expo* is described as “fun” and is connected to the previous listing with the connective *ko*, i.e., *caymiiss-ess-ko* ‘(it was) fun-and’ (line 8). The fun experience at the Expo becomes one of the positive features of *Jeollado* in the listing, which is resumed from line 8.

Line 7 is parenthetically inserted ending with *ketun* and supplements information for the upcoming listing. Whereas the previous two listings are about positive characteristics of *Jeollado* in general, the third listing becomes more specific after the insertion, which states the fact that L had been at the *Yeosu Expo* in *Jeollado*. Subsequently, starting in line 8, L talks about another good place he went in *Jeollado*. In this example, interestingly, HL% was realized in the *ketun* sentence (Figure 3.13). Similar to H%, HL% signals that the speaker intends to continue the talk while eliciting attention from the interlocutor. The function of HL% realized in *ketun* is similar to the HL% realized in the backgrounder *(nu)ntey* in that both combinations signal the subsequent talk and retain the interlocutor’s attention.

Figure 3.13 Pitch contour of H% on *-ketun*



### 3.4.2 In a thesis statement

Sentence-final *ketun* occurs in a thesis statement, which provides keyword information asked for in a question. The thesis occurs in preparation for an upcoming elaboration at the initial part of the response. The keyword information is newsworthy to the interlocutor and its newsworthiness is marked with *ketun*. In my data, only advanced speakers used *ketun* in a thesis statement.

Below is an interview with advanced speaker Mike. The interviewer asks Mike to compare differences and similarities between his current city Los Angeles and his hometown Washington.

#### Example 3.29

01 M: e:: iltan-un eyleyi-nun com taytosi-ko, solcikhi wesingthen tissi-nun  
uh firstly-TP LA-TP a.little big.city-and honestly Wasington DC-TP

02 -> com cak-un phyen-ui tosi-**ketun-yo?** [H%]  
a.little small-RL side-POSS city-ketun-POL

**Uh, firstly, LA is a big city and honestly Washington DC is relatively a small city.**

03 ku wesingten-ui inkwu-nun han sasipman-wen  
that Washington-POSS population-TP about four.million-won<sup>9</sup>

04 sasipman myeng cengto toy-nun ke kath-ko,  
four.million people approximately become-RL thing seem-and

**Uh the population of Washington seems approximately four-million won, four million people and,**

05 eyleyi-nun enu cengto-n-ka han chenman myeng cengto  
LA-TP how.many degree-RL-Q approximately ten.million people degree

**How many people live in LA? Approximately ten million?**

06 kulayse emcheng chai-ka na-nun ke-cyo.  
so very difference-SBJ grow-RL thing-COMM

**So the difference is very large.**

-----  
01 M: 어:: 일단은, 엘에이는 좀 대도시고, 솔직히 워싱턴 디씨는  
02 -> 좀 작은 편이 도시-**거든-요?** [H%]  
03 그 워싱턴의 인구는 한 사십 만원.  
04 사십 만 명 정도 되는 거 같고,  
05 엘에이는 어느 정도인가? 한 천 만 명 정도?  
06 그래서 엄청 차이가 나는 거죠.

Responding to the interviewer's question, Mike roughly compares the size of the two cities by describing Los Angeles as a big city and Wasngington D.C. as a relatively small city (lines 1-2).

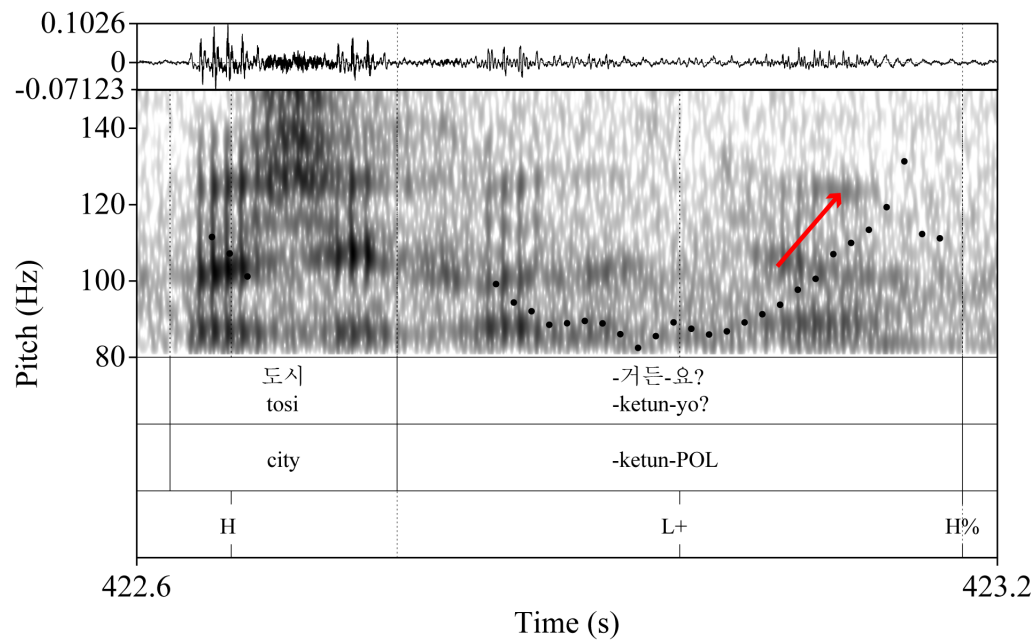
The keyword information about the difference between the two cities, i.e., their size, is provided with *ketun*. H% realized in *ketun* signals the continuation of the current talk while eliciting the interlocutor's attention. After the thesis statement ending with *ketun* and the co-occurring H%,

---

<sup>9</sup> Korean currency unit

the population of each city is subsequently specified and elaborated (lines 3-5). Figure below shows the H% realized in *ketun*.

Figure 3.14 Pitch contour of H% on *-ketun*



Example 3.30 shows a similar pattern. The interviewer asks why advanced speaker Mike decided to major in Korean history. He answers that *Hapkido*, one of the popular Korean martial arts, motivated him to have an interest in Korean culture.

Example 3.30

- 01 IR: kuntey way ku cenkong-ul taykha-key toy-si-ess-nunci,  
but why that major-AC choose-let become-HN-PST-whether
- 02 ku kyeyki-ey tayhayse com caseyhakey iyakihay-cwu-sey-yo.  
that motivation-in about a.little in.detail tell-give-HN-POL

**By the way, tell me in detail why did you choose that major.**

03 M: um. e:: iltan-un e hankwuk-ey kwansim-ul kac-key toy-n  
um uh first.of.all-TP uh Korea-in interest-AC have-let become-RL

04 kyeyki-nun kotunghakkyo ttay i-ess-nuntey  
motivation-TP high.school time be-PST-nuntey

05 -> ku ttay hapkito paywu-ko iss-ess-**ketun-yo**? [H%]  
that time hapkito learn-and exist-PST-ketun-POL

**Um first of all, I have been interested in Korea since high school. I was learning Hapkido at that time, you see.**

06 e:: hapkito-lul paywu-myense mwe sapwunim-i hankwuk-eyse  
um hapkoto-AC learn-while what teacher-SBJ Korea-from

07 o-si-n pwun-i-si-ess-nuntey e:: mwe  
come-HN-RL person-be-HN-PST-nuntey um what

**While I learn Hapkido-my Hapkido instructor was Korean from Korea**

08 e:: mwe hapkito-lul paywu-myense  
um what hapkoto-AC learn-while

**um while I was learning Hapkido,**

09 com hankwuk mwunhwa-ey pwutic-hi-ko  
a.little Korea culture-to contact-PS-and

**I experinced Korean culture and**

10 enu cengto nochwul-i toy-ess-nuntey  
which degree expose-SBJ become-PST-nuntey

**was exposed to Korean culture.**

11 kulayse kwansim-i com sayngki-key toy-ess-eyo.  
so interest-SBJ a.little have-let become-PST-POL

**So I came to be interested in Korea.'**

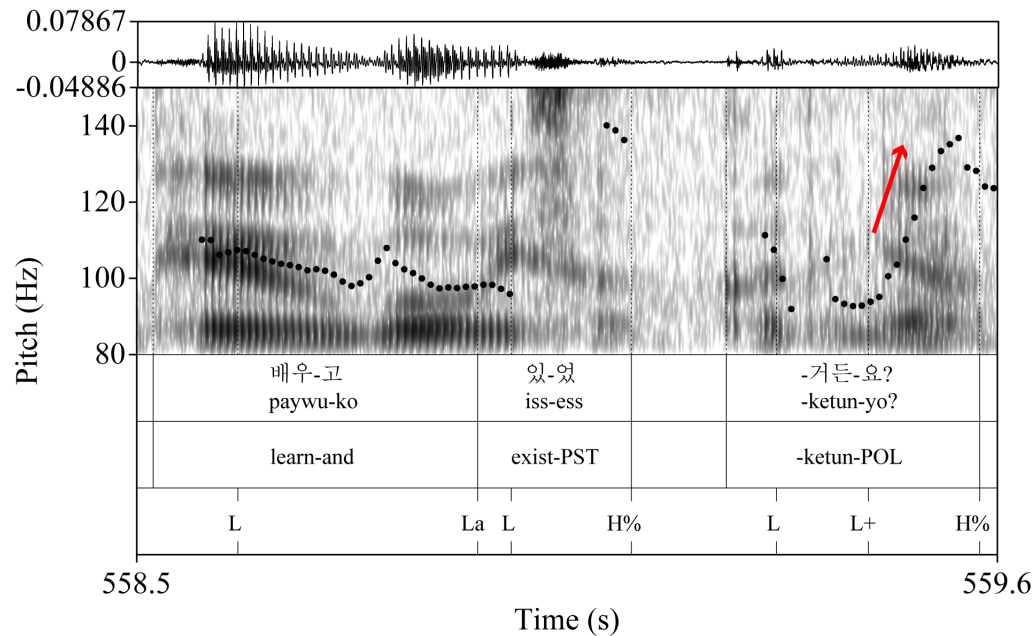
-----  
01 IR: 근데 왜:: 그 전공을 선택하게 되셨는지  
02 그 계기에 대해서 좀 자세하게 이야기해주세요.  
03 M: 음 어:: 일단은 어 한국에 관심을 갖게 된  
04 계기는 고등학교 때 였는데  
05 -> 그때 합기도 배우고 있-었-거든-요? [H%]  
06 어:: 합기도를 배우면서 뭐 사부님이 한국에서  
07 오신 분이셨는데 어:: 뭐  
08 합기도를 배우면서



09            좀 한국문화에 부딪히고  
 10            어느 정도 노출되었는데  
 11            그래서 관심이 좀 생기게 됐어요.

In the *nuntey* subordinate clause in lines 3-4, Mike gives the background information about when he became interested in Korea, i.e., when he was a high school student. In the *ketun* main clause, he gives the keyword information about what led him to have interest in Korea. He said that he was learning *Hapkido* when he was a high school student in America. He continues to explain how *Hapkido* enabled him to have an interest in Korean culture afterwards (lines 6-11). As can be seen, the keyword information *Hapkido* is given in the thesis statement ending with *ketun* and is elaborated subsequently. The H% signals further relevant elaboration to come.

Figure 3.15 Pitch contour of H% on *-ketun*



### 3.5 Conclusion and discussion

This chapter has examined the use of *(nu)ntey* and *ketun* and their boundary tones in the context of interviews with L2 speakers. *(Nu)ntey* was used as a backgrounder and a mitigator. The different uses were associated with different boundary tones. Whereas the backgrounder was realized with H% or HL%, the tone mitigator often involved rising boundary tones such as LH% or H%. *Ketun* was used to signal parentheticals in an insertion and to mark thesis statements in the initial part of a response; H% was used most frequently for both meanings. When *ketun* occurs at an insertion, it provides supplementary information for the preceding or upcoming sentences. *Ketun* in the initial part of a response provides thesis information, which is elaborated subsequently.

Prosodically, H% and HL% were used frequently with *(nu)ntey* as a backgrounder and *ketun* in both uses. They signaled that the speaker had more to say and caused the interlocutor to relinquish his/her turn. On the other hand, the mitigator *(nu)ntey* was realized with rising boundary tones such as H% or LH%. Unlike H% and HL% used in the other situations, the rising boundary tones elicit the interlocutor's subsequent 'response' rather than 'attention' only and do not signal the current speaker's turn continuation. H% was the most common boundary tone used in all four situations. Thus, sometimes, H% cues the occurrence of the subsequent talk by the current speaker but in other times it may invite the interlocutor's response. These suggest that one boundary tone may convey different pragmatic meanings depending on co-occurring suffix types and contexts. The figures below illustrate the relationship between suffix, boundary tone, and pragmatic meanings in this chapter.<sup>10</sup>

---

<sup>10</sup> The most frequent boundary tones were illustrated in the figures. More detailed numbers can be found in Tables 3.2 and 3.4.

Figure 3.1 Relationship between pragmatic meanings and the combination of suffixes and boundary tones

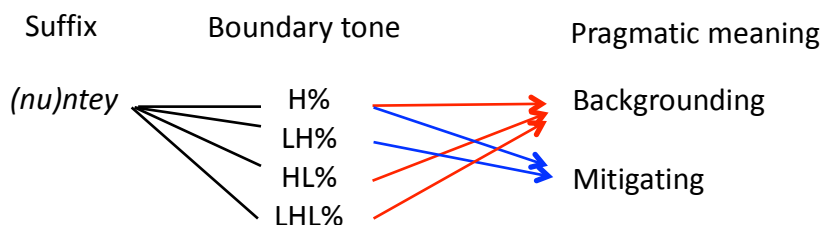
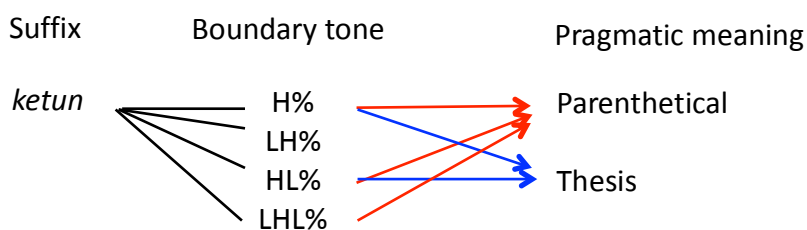


Figure 3.16 Relationship between pragmatic meanings and the combination of *ketun* and boundary tones



In terms of the use of *(nu)ntey* and *ketun* by proficiency level, both advanced and intermediate speakers were able to use *(nu)ntey* as backgrounder and *ketun* as a parenthetical. However, differences were found in use of *ketun* in a thesis statement and *(nu)ntey* as a mitigator. In the use of *ketun* in the thesis statement, only advanced speakers were able to produce a thesis statement with *ketun*. In the use of *(nu)ntey* as a mitigator, while speakers at both levels used *(nu)ntey* to convey dispreferred messages, advanced speakers' mitigation was more focused on negotiating complications generated by the role-play situation (e.g., difficulty in scheduling an appointment with the doctor). In contrast, intermediate speakers' mitigation by *(nu)ntey* was used to obtain linguistic assistance: the speakers tried to turn the relationship with the interviewer into one between a language learner and a native speaker, rather than between an interviewee and an interviewer. That is, intermediate speakers tended to shift the interview context into a language-learning context. Moreover, compared to intermediate speakers, advanced speakers were more

proficient at signaling various pragmatic cues using different combinations of suffix and boundary tones. The results indicate that prosodic manipulation reflects speakers' proficiency at L2s and their L2 pragmatic competence.

## CHAPTER 4

### SECOND LANGUAGE PROSODY AND PARENTHETICALS

#### 4.1 Introduction

Among various prosodic features, this chapter focuses on contexts in which prosody-syntax mismatches enable the speaker to continue the turn.<sup>11</sup> For example, the speaker may prosodically pass a possible syntactic completion unit or a turn constructional unit (TCU) by speeding up the pace of talk or by reducing a gap between two utterance units. Thus, a possible turn transition place is prosodically passed by the current speaker. This prosodic strategy is described as a “rush-through” or “latching” in Conversation Analysis (Schegloff 1982, 1996). In terms of sequential contexts, the chapter will examine parenthetical constructions, in which the speaker extends the turn with parenthetical information; the extended turn is continued by the current speaker through prosody-syntax mismatches. Parentheticals are defined as strings of talk inserted in the on-going main or host utterances. According to Dehé and Kavalova (2007), parentheticals are “linearly linked” to the course of the host utterance but are “structurally independent (p. 1).” Parentheticals have been identified by their syntactic and prosodic relationships with the host utterance. The majority of the previous studies, based on syntactic theories, have shown that parentheticals are syntactically separated and excluded from the host. Parentheticals have also been considered to have their own prosodic domains independent from the host and to “interrupt the prosodic flow of the frame utterance” (Bolinger, 1989, p, 185). If the parenthetical were removed from the host, the pre- and post-part of the parenthetical would be prosodically well connected. Parentheticals have been typically described as having a smaller

---

<sup>11</sup> Iwasaki and Tao (1993) observed that intonation units often occurred after non-clausal units for interactional or grammatical reasons in natural conversations, especially in languages other than English such as Japanese or Mandarin Chinese.

pitch range, faster rate of speech, or quieter intensity than the host sentence. Döring (2007) described how parentheticals are prosodically separated from the host; she focused on prosodic features of the “transition zone” between the right boundary of the host (i.e., Part of the Anchor clause Preceding the Parenthetical Construction (PAPPC)) and the left boundary of the parenthetical. She found that the left boundary of the parenthetical tended to be uttered more quietly, rapidly, and at lower pitch than the right boundary of the host, and to be set off by pauses. Moreover, she found that the right edge of the host was often lengthened or ended with a mid-level tone, separating its prosodic unit from that of the following parenthetical. However, Dehé (2007) found prosodic irregularities in parentheticals and showed that many syntactically independent parentheticals are prosodically integrated with their hosts. For example, in Example 4.1, the comment clause *I think* joins with the host utterance prosodically without any pause between *voters* and *I*, while being syntactically independent from host. Figure 4.1 shows the prosodic grouping.

#### Example 4.1

The voters *I think* just have an opportunity to stick two fingers up to whoever seems to be on top at the moment (ICE-GB: s1b-029, #92)

Figure 4.1 Prosodic grouping in Example 4.1

(The voters *I think*) (just have an opportunity) (...)

This chapter is in line with previous studies of naturally occurring data which found prosodic integration of parentheticals with the host (Cf. Dehé, 2007). It finds that in L2 speakers’ discourse, parentheticals are prosodically linked to the immediately surrounding utterances of the

host at the transition zone. More important, instead of merely relying on a description of pitch contours, this chapter analyzes the prosodic integration/disjunctures using the ToBI transcription system. The ToBI is a categorical labeling system based on the phonological model of intonation of a specific language. The tonal categories and the degree of juncture between words are labeled based on the perception of the labeler while referring to the pitch tracks of an utterance aligned with waveform and spectrogram. Therefore, it provides an objective measure to define prosodic integration or disjuncture, while the description of prosody without a model and acoustic data may be subjective.

## **4.2 Previous studies**

### **4.2.1 Turn-taking practices and prosody**

Turn-taking, which enables speakers to participate in and sustain conversation, is an indispensable skill for second language (L2) learners. Over several decades, researchers have discovered how proficient speakers manage their turns by determining when to begin talking and when to stop. Yet L2 learners' turn-taking practices, especially the essential role of prosody in signaling changes in speakership, remain understudied. Many have investigated turn-taking practices in L1 conversation. Sacks, Schegloff, and Jefferson (1974) noted that "sound production" including phonology and intonation is an important cue for turn-taking practices. To illustrate, 'what' could be a single-word question (e.g., what?) or a part of a larger clause (e.g., what is your name?) depending on its intonation. In the former case, the other party would typically take a turn after the one-word question, while in the latter he/she would typically wait until the 'what'-clause had ended.

Cutler and Pearson (1986) found that intonation is a significant factor for judging turn-taking cues. Experiment participants judged a syntactically complete utterance as turn-medial when the final tone of the utterance was up-stepped; they judged the same utterance as turn-final when the final tone was down-stepped. Other acoustic features (e.g., duration) did not significantly affect the participants' distinctions between turn-medial and turn-final utterances.

As Ford and Thompson (1996) discussed, the turn transition place is determined by the combination of prosodic, syntactic, and pragmatic factors; they referred to this as a "Complex Transition Relevance Place" (CTRP). However, these factors do not equally contribute to turn completion. In their findings, whereas intonation completion points were accompanied by syntactic completion points in 98.8% out of all tokens, only 53.6% of syntactic completion points were accompanied by intonation completion points. This suggests that intonation is more reliable indicator than syntactic units in predicting a change in speakership. This also shows that syntactic and prosodic completion points or boundaries do not necessarily coincide but can occur independently, which may create a mismatch between the two unit boundaries.

Wells and Peppé (1996) created a list of phonetic features signaling turn-endings (e.g., lengthening on the final stressed syllable of the turn, pause at the end of the turn). They argued that a cluster of these phonetic features signal turn-endings, and that a turn which lacked such features was not considered as turn-ending even though the turn was complete syntactically. This suggests that intonation has a stronger effect than syntax in determining turn-endings.

In addition to its role in turn constitution and completion, Schegloff (1998) discussed the role of prosody in turn projection. In an analysis of naturally occurring conversation, he found the pitch peaks project the upcoming possible completion of the turn and are often followed by the other speaker's uptake. In the following telephone conversation, Ava's pitch peak on the first



syllable in 'hi:ghschool', which projected the turn completion, was subsequently followed by Bee's uptake 'basketball'. The uptake overlaps with the final syllable of 'highschool' in the previous turn showing Bee's immediate response to the turn projection cue (i.e., pitch peak).

#### Example 4.2

01 Ava: I'm so:: ti:yid. I j's played ba:ske'ball t'day since  
02 ->the firs' time since I wz a freshm'n in hi:ghsch[ool.]  
03 Bee: -> [Ba::]sk(h)et=  
04 b(h)a(h)ll? (h) [(Wh(h)re.)  
05 Ava: [Yeah fuh like an hour enna ha:[lf.]

Wennerstrom and Siegel (2003) have emphasized the realization of intonation boundaries (e.g., rising, falling, plateau) in the determination of turn shifts. Intonation in natural conversations between friends and acquaintances was labeled based on Wennerstrom's (2001) intonation categories (high rise, low, plateau, low rise, partial fall, and no boundary). A logistic regression analysis revealed that high rise and low phrase-final intonation were most frequently used when speakers yielded turns to each other. In contrast, a syntactic boundary or the completion of one syntactic unit did not necessarily involve turn-taking, especially when there was no intonation boundary (cf., Ford and Thompson, 1996).

In L2 contexts, Wennerstrom (2000) showed that intonation was one of the most significant variables determining language learners' oral fluency. She found that non-native English speakers used intonational cues for turn holding in conversation. While more fluent speakers were able to use a plateau boundary tone or a low-rise boundary tone to signal turn continuation, less fluent speakers were less proficient in using such prosodic cues, which often confused the other speaker as to when to join the talk. She proposed that the ability to use particular tones to hold or yield turns should be included in fluency.

To summarize, previous studies in various fields including Conversation Analysis and interactional linguistics have revealed the importance and the role of prosodic features in turn-taking in L1 discourse. While prosody is likely to play an important role in L2 discourse, there has been a general lack of research on L2 learners' use of prosody in turn-taking. Thus, this study focuses on L2 learners' use of prosody in oral interviews in Korean and in syllabus presentations in English. For a control, native speakers' data is analyzed as well.

#### **4.2.2 ToBI labeling**

This chapter uses the ToBI (Tones and Break Indices) transcription system of intonation and juncture to examine the prosodic relationship of the host sentence and the parenthetical phrase and how these two interact in the transition zone between the host and the parenthetical phrase. ToBI is a transcription system that labels tonal targets (the 'To' part) on the 'tones' tier and the degree of juncture between words (the 'BI' part) on the 'break index' tier. The tones on the tones tier mark prominence as well as the boundary of a prosodic unit such as an Intonation Phrase (IP), an Intermediate Phrase (ip), or an Accentual Phrase (AP), and the break index on the BI tier marks the degree between adjacent words. The transition between the host and the parenthetical phrase is often marked by an IP-like juncture but can be smaller to signal the speaker's intention and interactional context.

The break index tier indicates the labeler's subjective perception of the degree of juncture between two adjacent words. Break indices are labeled with numbers from 0 to 3 in Korean<sup>12</sup> and 0 to 4 in English; each number generally corresponds to the hierarchical prosodic unit in the intonational model of the target language. "0" marks the juncture smaller than a typical word

---

<sup>12</sup> Korean-ToBI (Jun 2000) is based on the model of intonational phonology of Korean in Jun (1993), where only two prosodic units above the Word (i.e., IP and AP) were proposed.

boundary (e.g., clitic groups such as ‘I’m’, ‘gonna’) in both languages or ‘incomplete’ monosyllabic nouns which require a modifier (e.g., *swu* ‘way’, *ke(s)* ‘thing’) in Korean; “1” generally marks phrase-medial word boundaries in both languages. But “2” is different between English and Korean. In Korean, “2” marks a boundary corresponding to an AP-like juncture. Thus, the degree of juncture is larger than a word boundary but smaller than an IP-like boundary which is marked with substantial phrase-final lengthening and an optional pause. This IP-like boundary corresponds to the break index ‘3’. In English, “2” does not correspond to any prosodic unit, but instead it refers to a juncture where the tonal cues mismatch the degree of the juncture cue. Therefore, in English, “3” refers to the degree of juncture corresponding to an ip-like boundary with a small degree of final lengthening, thus larger than a phrase-medial word boundary, i.e., BI “1”. Finally, “4” in English marks a boundary realized with substantial phrase-final lengthening and an optional pause, thus corresponding to an IP-like boundary.

Discrepancies or mismatches between the labeler’s perceived junctures on the BI tier and the tonal cues marking the boundary are handled slightly differently in Korean. In this language, the diacritic “m” is added after a break index. “2m” marks the labeler’s perceived juncture of “2” (i.e., an AP-like boundary) but with either no tonal markings of AP or the tonal markings of an IP (i.e., tonal markings corresponding to a juncture that is either smaller or larger than “2”). “3m” labels a mismatch between the labeler’s perceived juncture of “3” (i.e., an IP-like boundary) but with the tonal markings of AP. Furthermore, ToBI uses a minus (-) sign to mark the labeler’s uncertainty between two levels of perceived juncture (e.g., “4-” indicating uncertainty between 3 and 4).

Relevant to this chapter analysis, break indices with diacritics “-” mark a weaker prosodic boundary than a regular IP boundary (BI=3 or 4 in Korean and English, respectively) with weak

lengthening. Break indices smaller than 3 in Korean and 4 in English are used to show prosodic integration between the host and the parenthetical while break indices 3 and 4 mark prosodic separation in Korean and English, respectively. The degree of disjuncture increases in the following order: 2 < 3- < 3 (separation, Korean); 3 < 4- < 4 (separation, English). The meaning of the break indices relevant to this study is summarized in Table 4.1. More detailed descriptions of each break index will be presented in the analysis.

Table 4.1 Break Indices and their meaning in Korean and English

BI	Korean	BI	English
2	AP boundary	3	ip boundary
3-	Labeller's uncertainty between AP and IP boundaries due to the relatively weak lengthening of IP boundaries; IP boundary tone (%) is labeled but the labeler notes its weak lengthening with the minus diacritic	4-	Labeller's uncertainty between ip (BI=3) and IP (BI=4) boundaries due to the relatively weak lengthening of IP boundaries
3	IP boundary	4	IP boundary

Note1. "BI"= break index

Note2. "-" = labeller's uncertainty between two adjacent levels of break index

## 4.3 Analysis

### 4.3.1 Native speakers

In Example 4.3, native Korean speaker Sandy talks about her hobby, acrylic painting, and lists its three-step sequence: sketching, squeezing tubes of paint, and brushing at lines 9-15.

#### Example 4.3

01 Int.: kuli-nun kwaceng-ul cokum cwuuisahang-kwa hamkkey  
 paint-RL sequence-AC a.little precaution-with together

02 com caseyhi selmyenghay cwu-si-l swu iss-usey-yo?  
a.little carefully explain give-HN-RL DN can-HN-POL

**Could you please explain in detail how you paint?**

03 S: kuli-nun kwaceng?  
paint-RL sequence

**How do I paint?**

04 Int.: cheum-ey cwunpimwul. mwe,  
first-at supply what

**At first, (you can talk about) art supplies (you need).**

05 S: ney. a cwunpimwul-un iltan sukheypwuk-ilang,  
okay um supply-TP first.of.all sketchbook-and

**Okay, um, first of all, (you need) a sketchbook and,**

06 Int.: ney.

**Okay.**

07 S: mwulkam-ilang, pwus-ilang, ku taum mwulthong.  
paints-and brush-and that next bottle

08 hako ppaleythu yaykihay-ss-na-yo. cey-ka? ppaleythu-lang.  
and palette tell-PST-Q-POL I-SBJ palette-and

**(You need) paints, brushes, and then a bottle, and - did I say a palette? –  
(You need) a palette.**

09 S: -> iltan-un cwulo yenphil-lo sukheychi-lul haytwu-kwu-yo,=  
first-TP usually pencil-with sketch-AC do-and-POL

So first I usually sketch with a pencil,

10 -> =waynyamyen .h (0.1)  
because

11 eccaysskena swuyongseng-i-n sengcil ttaymwuney  
anyway water.solvent-be-RL characteristic because

12 phen-un penci-l <ke kath-te-la-kwu-yo.  
pen-TP smear-RL thing seem-RT-DC-QT-POL

**because of water solubility, the pen seems like it would smear.**

13 kuse .h yenphil-lo sukheychi-lul ha-ko,  
so pencil-with sketch-AC do-and

14 kulen taum-ey mwulkam-ul ppaleythu-ey cca-se  
that then-LOC paint-AC palette-on squeeze-and

15 pwus-ulo chil-ul ha-nun ke-cyo.  
brush-with paint-AC do-RL thing-COMM

**So I sketch with a pencil and then after that I squeeze some paint on my palette and I brush away.**

-----

01 Int.: 그리는 과정을 조금 주의사항과 함께  
02 좀 자세히 설명해 주실 수 있으세요?  
03 S: 그리는 과정?  
04 Int.: 처음에 준비물. 뭐,  
05 S: 네. 아 준비물은 일단 스케치북이랑,  
06 Int.: 네.  
07 S: 물감이랑, 붓이랑, 그 다음 물통.  
08 하고 빠레트 얘기했나요. 제가? 빠레트랑.  
09 -> 일단은 주로 연필로 스케치를 해두구요,=  
10 -> =왜냐면 .h (0.1) 어쨌거나  
11 수용성인 성질 때문에  
12 펜은 번질 <거 같더라구요.  
13 그서 .h 연필로 스케치를 하고,  
14 그런 다음에 물감을 빠레트에 짜서  
15 붓으::로 칠을 하는 거죠.

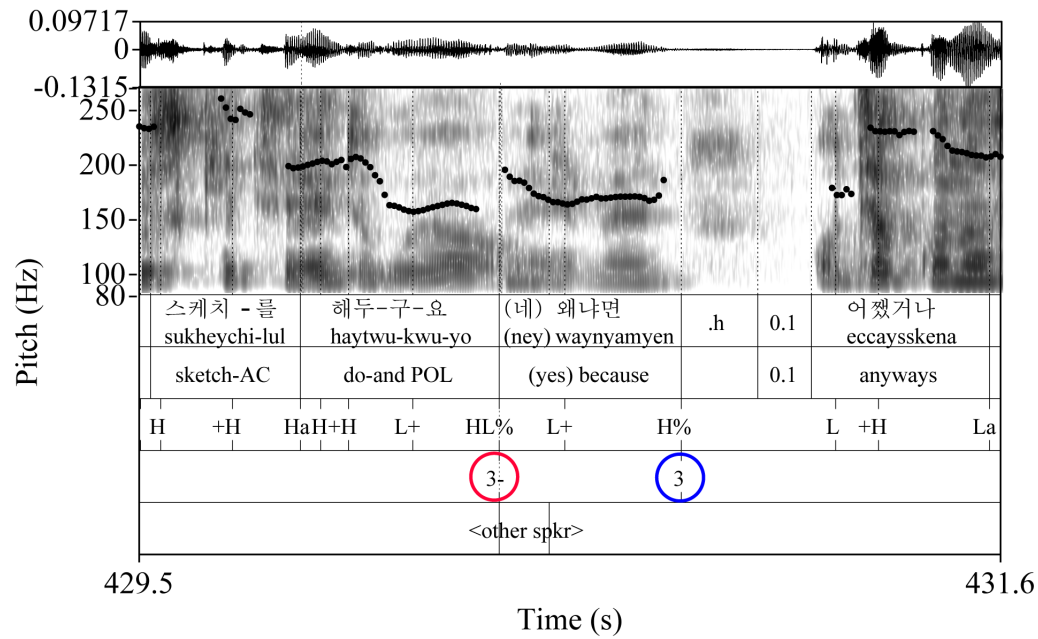
((S continues to explain the steps involved in painting))

Whereas the main information about the steps involved in painting is provided in lines 9 and 13-15, supplementary parenthetical information for the first step is elaborated in lines 10-12. In the parenthetical, Sandy gives a reason for using a pencil rather than a pen when sketching: The pen seems likely to smear because it is water soluble. Although the last two painting steps are sequentially delayed by the parenthetical insert, they are projected by various devices. First, the first painting step at line 9 ends with the clausal connective suffix *kwu* ‘and,’ ending with the polite ender *yo*, and with a HL continuing boundary tone (%). The lexical meaning of *kwu* ‘and’ co-occurring with the continuing boundary tone projects a continued description of the painting

procedure. Second, the discourse connective *kuse* ‘so’ (line 13) functions as a “resumptive” or “continuative” token and connects the sentence after *kuse* to the much earlier sentence at line 9 (Kim & Suh, 1996). Third, the first painting sequence is partially repeated after the parenthetical at line 13 and the description of the rest of the painting sequences are resumed afterward. Thus, the second and third steps of painting are connected smoothly to the first step despite the intervening talk.

Figure 4.2 shows the pitch contour and prosodic grouping of the transition zone in 4.3. The portion of utterances shown in the figure is indicated with arrows in the excerpt.

Figure 4.2 Transition zone in Example 4.3



The break index 3- between the pre-insert *sukheychi-lul hay twu-kwu-yo* ‘I sketch’ and the initial word of the parenthetical *waynyamyen* ‘because<sup>13</sup>’ indicates that there is short lengthening on the

<sup>13</sup> Unlike English, *waynya(ha)myen* ‘because’ is a sentence-initial conjunction, and connects two sentences.

final syllable *yo* of the previous phrase *sukheychi-lul hay twu-kwu-yo* between the two phrases, in HL% (0.18 sec); this is not lengthened as sufficient as in regular IP boundary. Thus, the two phrases, which are *syntactically* separate, are *prosodically* integrated. On the other hand, *waynyamyen* of the parenthetical is prosodically disconnected from the subsequent phrase *eccaysskena* in the same syntactic unit. The break index 3 after *waynuamyen* marks the IP boundary between the two phrases. The lengthening of H% is 0.21 second, longer than the lengthening in HL%. An inbreath and a 0.1 second pause separate the two phrases prosodically as well. The mismatch between syntax and prosody boundaries is illustrated in Figure 4.3. The bracket marks a prosodic group and the curly bracket marks a syntactic group; “S” stands for sentence. A prosodic boundary (%) occurs between the two IPs while the syntactic boundary (#) occurs between the two sentences.

Figure 4.3 Prosody-syntax mismatch in Example 4.3

[{sukheychi-lul haytwu-kwu-yo}<sub>S</sub>#{waynyamyen}<sub>IP</sub>.h (0.1) % [eccaysskena ...]<sub>IP</sub>}<sub>S</sub>

‘I sketch because .h (0.1) anyways...’

A similar pattern is found in the English data. The native English speaker Alex responds to a student’s question about whether it would be okay to use a calculator during the test.

#### Example 4.4

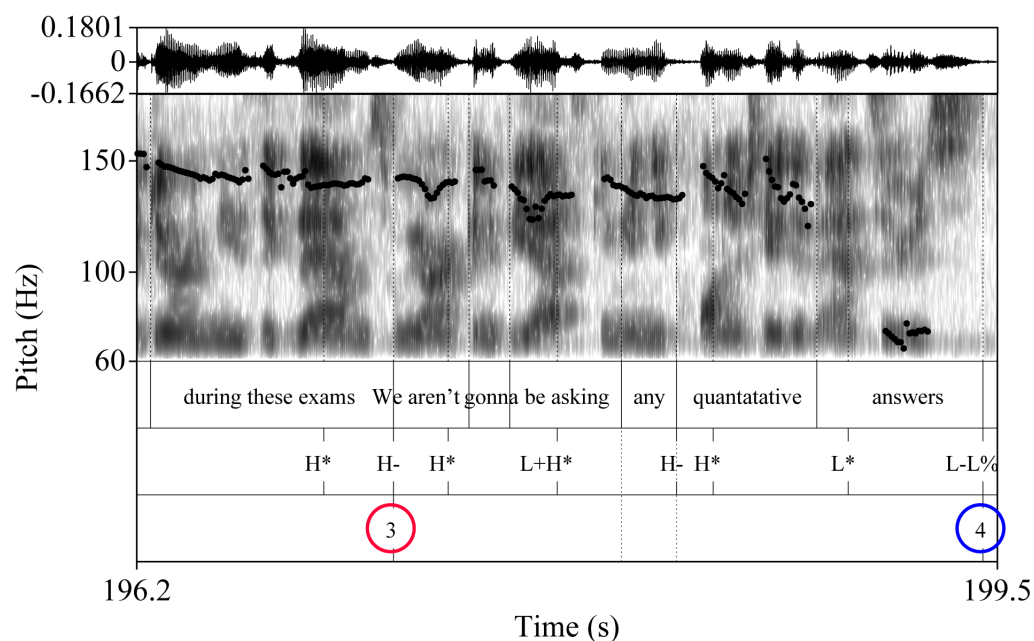
01 Student: And also can we use the calculator in the exam?  
 02 Alex: -> (...) um you won't have to during these exams,=  
 03 -> =we aren't gonna be asking any quantitative answers,  
 04 -> um this is basically organic chemistry course,=  
 05 -> =so. (0.4) uh you won't really be needing it.

((Student questions))



Alex informs the student that calculators will not be necessary for the course (line 2). Then he provides supplementary information about why students will not need calculators from lines 3 to 4: because the subject, organic chemistry, does not involve questions asking for calculation. At line 5, Alex rephrases the host at line 2 and returns to the main point. Two transition zones are identified: 1) from host to parenthetical between lines 2 and 3; and 2) from parenthetical to host between lines 4 and 5. The first transition zone in which the speaker enters into the parenthetical is shown in Figure 4.4.

Figure 4.4 Transition zone in Example 4.4 (lines 2-3)



The pre-insert host *um you won't have to during these exams* and the parenthetical *we aren't gonna be asking any quantitative answer* are in the same IP, which is marked with H% and the break index 4. While the two phrases are prosodically integrated, they are syntactically independent from each other. Alex produces the parenthetical immediately after the host and

passes the syntactic boundary. The mismatch in prosody and syntax boundaries is shown below.

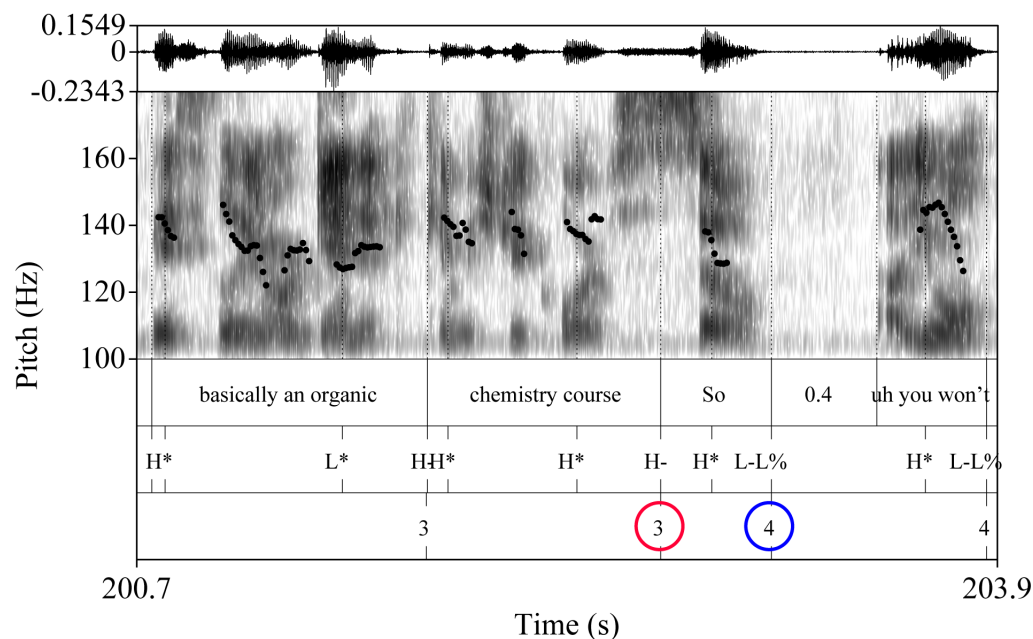
Figure 4.5 Prosody-syntax mismatch in Example 4.4 (lines 2-3)

[{... during these exams.}S#{We aren't gonna be asking any...}S]IP %

The syntactic boundary occurs between the two phrases but the prosodic boundary occurs after the two phrases.

The parenthetical continues and the second transition zone occurs between lines 4 and 5, when Alex returns to the host from the parenthetical. In the parenthetical, Alex elaborates on the reason why students do not need calculators. He mentions the course title, organic chemistry and implies that organic chemistry does not have questions requiring calculations. When returning to the host, Alex rephrases the pre-insert host *you won't have to* as *you won't really be needing it* at line 5. Figure 4.6 shows how the parenthetical at line 4 and the host at line 5 are prosodically integrated.

Figure 4.6 Transition zone in Example 4.4 (lines 4-5)



As can be seen, the L% with break index 4 occurs after the conjunction *so*. That is, the final part of the parenthetical *basically an organic chemistry course* and the initial part of the host *so* are prosodically grouped into the same intonation unit although they are syntactically separate. The final word of the host *course* is lengthened for only 0.18-second whereas a 0.26-second lengthening occurs on *so* at the prosodic boundary. The 0.4-second pause also reveals that the prosodic boundary occurs after *so* at the non-syntactic boundary. Figure 4.7 shows the mismatch between the prosodic and syntactic boundaries.

Figure 4.7 Prosody-syntax mismatch in Example 4.4 (lines 4-5)

{...[basically an organic chemistry course]<sub>S</sub>#{so]<sub>IP</sub>% [uh you won't]...}<sub>S</sub>

These native speaker examples show that parentheticals are prosodically integrated with the host. In the Korean example, Sandy signals the entering into the parenthetical by rushing past

a syntactic boundary. Her interlocutor does not attempt to take a turn until Sandy finishes her response. In the English example, Alex also rushes into the parenthetical immediately after the pre-insert host and into the post-insert host after the parenthetical. This prosodic linking often occurs across a syntactic boundary, resulting in a mismatch between prosodic and syntactic boundaries. That is, a prosodic boundary does not always coincide with a syntactic boundary. Such mismatches enable the speaker to continue the turn and the interlocutor to suspend their turn. The interlocutor is less likely to interrupt when either a syntactic boundary or prosodic boundary occurs.

#### 4.3.2 Second language speakers

Parentheticals are also used by L2 learners of Korean and English to provide supplementary information relevant to the host. Prosodic integration between host and parenthetical at the transition zone also occurs and enables the speaker to hold the turn. In Example 4.5, an intermediate Korean L2 speaker Jerry is asked to describe his daughter's appearance in detail at line 1. Jerry talks about his daughter's hairstyle.

##### Example 4.5 (intermediate)

- 01 Int.: kulemyen mwe atul-ina ttal pwun han myeng senthaykha-si-ese  
 then what son-or daughter person one CNT select-HN-and
- 02 ce-hanthey elkwul-ul com caseyhakey myosahay cwu-l swu iss-usey-yo?  
 me-to face-AC a.little carefully describe give-RL DN exist-HN-POL
- Then, could you describe one of your son's or daughter's appearance in detail?**
- ((lines omitted))
- 05 J: e kulay-yo. ttallaymi yaykiha-l-key-yo.  
 oh okay-POL daughter tell-RL-will-POL

**Oh okay. Let me talk about my daughter.**

06 uh melikhalak-un kil-ko,  
uh hair-TP long-and

**Uh, (my daughter's) hair is long and,**

07 -> uh hancham.tongan an calla-ss-eyo=  
uh for.a.long.time not cut-PST-POL

**Uh she hasn't cut her hair for a long time.**

08 -> =kulayse acwu kil kil-ko ku com kanul-eyo.  
so very lo- long-and that a.little thin-POL

**So (her hair) is very lo- long and, um a little thin.**

((continue to describe his daughter's appearance))

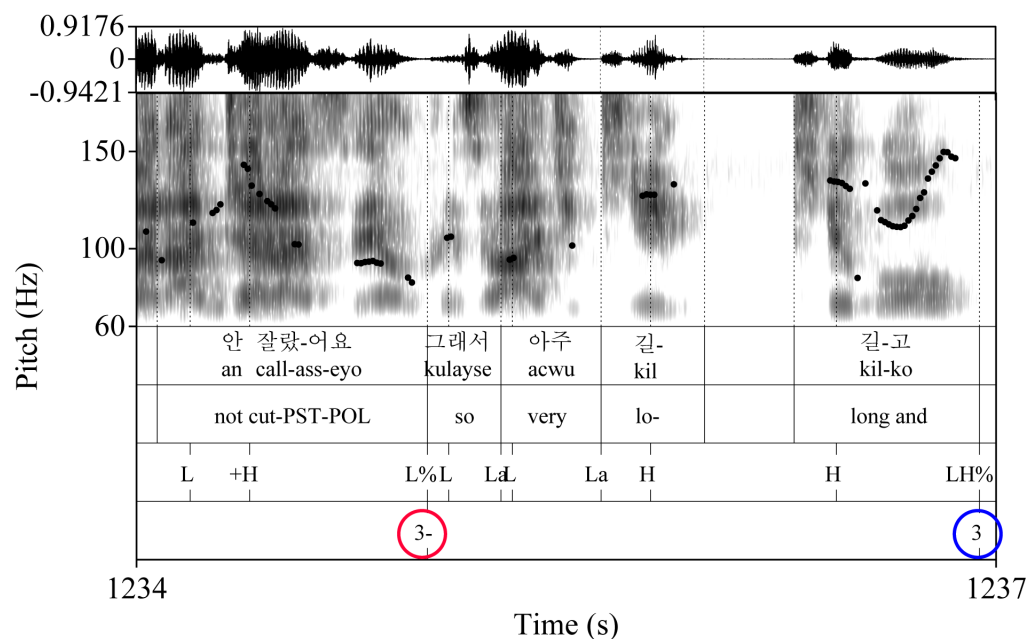
-----  
01 Int.: 그러면 뭐 아들이나 딸 분 한 명 선택하셔서  
02 저한테 얼굴을 좀 자세하게 묘사해 줄 수 있으세요?  
((lines omitted))  
05 J: 어 그래요. 딸래미 얘기할게요.  
06 어, 머리카락은 길고,  
07 -> 어 한참동안 안 잘랐어요.=  
08 -> =그래서 아주 길-길고, (.) 그 좀 가늘어요.  
((continue to describe his daughter's appearance))

The main description responding to the question is given in lines 6 and 8. A reason for line 6 is supplied in the parenthetical at line 7. Jerry says that his daughter has long hair (line 6) and ends the description with the clausal connective *ko* 'and' and with a continuing rising intonation (or, LH%). *Ko* and the rising intonation project subsequent description. However, Jerry digresses slightly from describing his daughter's appearance and provides a reason why his daughter has long hair – that 'she hasn't cut her hair for a long time' – in the parenthetical in line 7. Then, Jerry resumes the description starting in line 8. The pre-insert *melikalak-un kil-ko* '(my daughter's) hair is long' is rephrased and repeated in the post-insert description as *acwu kil kil-ko*

‘(her hair is) very long’ (underlined), and connects with the main information at lines 6 and 8. The rest of the description follows *com kanul-eyo* ‘(her hair) is a little thin’.

Latching (=) occurs at the transition zone between the predicate of the parenthetical insert *an calla-ss-eyo* (line 7) and the post-insert description *kulayse acwu kil- kil-ko* (line 8). Figure 4.8 shows the prosodic relationship of the predicate and description.

Figure 4.8 Transition zone in Example 4.5



As shown, after the parenthetical *an calla-ss-eyo*, L% marks the boundary of the IP. However, due to the short lengthening of the L% (0.11-second), the break index is labeled as 3-. The lengthening is not as long as for a regular IP; the weak lengthening is marked with the minus sign. A full IP boundary with 0.3-second lengthening occurs after *kil-ko* ‘long-and’ in the post-insert host. Prosodic and syntactic boundaries are represented in Figure 4.9. The second phrase

*kulayse acwu kil- kil-ko* ‘so (her hair) is very long’ is prosodically integrated with the predicate of the parenthetical *an call-ass-eyo* ‘(she) hasn’t cut her hair.

Figure 4.9 Prosody-syntax mismatch in Example 4.5

[{an call-ass-eyo}<sub>S</sub> # {kulayse acwu kil- kil-ko}<sub>S</sub>]<sub>IP</sub> %

(She) hasn’t cut her hair so very lo- long and

While the prosodic boundary occurs after *kil-ko* in the host, the syntactic boundary occurs between the parenthetical and the host. *Kulayse* ‘so’ is a sentence-initial conjunction and projects a subsequent phrase in the same syntactic unit.

Example 4.6 is a response by advanced speaker Chris. In this interview, Chris lists his leisure activities in response to the interviewer’s question.

Example 4.6

01 Int.: kulemyen, Chris ssi cikum haksayng-i-si-ese pappu-si-l ke kath-untey,  
then NAME Mr. now student-be-HN-so busy-HN-RL thing seem-untey

02 kulayto hoksi sikan nam-ul ttay  
but by.any.chance time leave-RL when

03 cwulo etten ilha-myense sikan ponay-sey-yo?  
usually which work-while time spend-HN-POL

**Then, Chris, I guess you must be busy because you are a student but when you have free time what do you usually do?**

04 C: mwe yenghwa po-tenka umak kathi tut-kena  
what movie watch-or music together listen-or

05 uh mwe sanchaykha-tunka mwe kathi wuntong-ul  
uh what take.a.walk-either what together exercise-AC

**Well, (I) watch movies or listen to music or uh well take a walk or do exercise (with my wife)**

06 -> ha-tunka ku suphochu cohaha-ketun-yo?=  
do-either that sports like-you.see-POL

**You see I like sports.**

07 -> =kulayse suphochu-to manhi:: ha-ko  
so sports-too a.lot do-and

05 mwe nongkwu-na chwukkwu-na ...  
what basketball-or soccer-or ...

**So I do sports a lot uh basketball or soccer or ...**

-----  
01 Int.: 그러면, 채드씨 지금 학생이셔서 바쁘실거 같은데,  
02 그래도 혹시 시간 남을 때  
03 주로 어떤 일하면서 시간 보내세요?  
04 C: 뭐 영화 보든가:: 음악 같이 듣거나  
05 어:: 뭐:: 산책하든가 뭐 같이 운동을 하든가,  
06 -> 그 스포츠 좋아하거든요? =  
07 -> =그래서 스포츠도 많이:: 하고  
08 뭐:: 농구나 축구나...

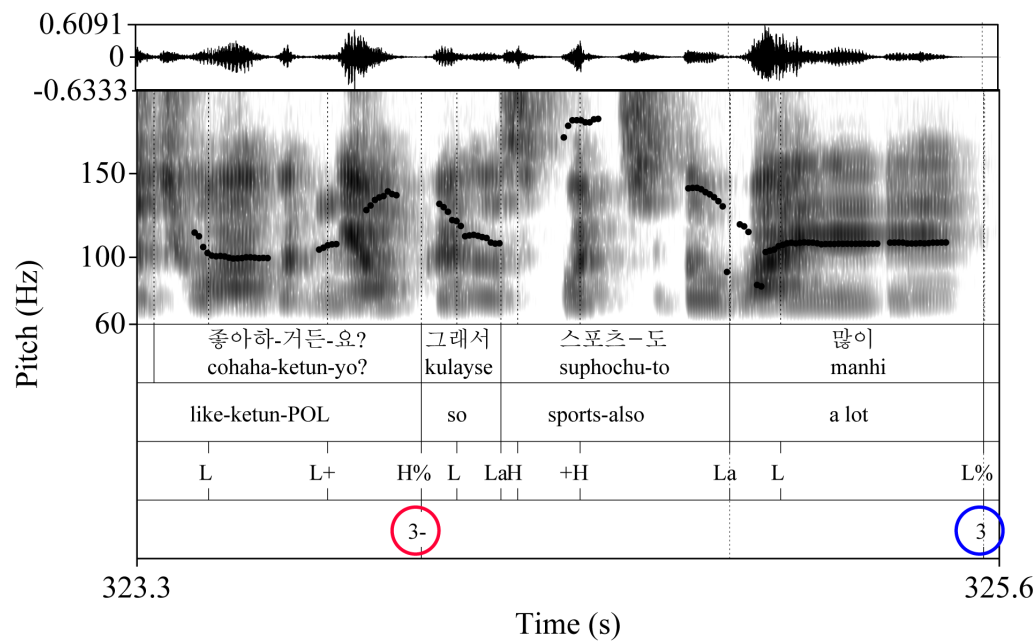
Chris randomly lists a variety of pastime activities by using the suffix *-tenka* ‘either...or’, the spoken form of *tenci*, including watching movies, taking a walk, and doing exercise (lines 4-5). He then momentarily stops the list, and focuses on one specific activity, sports, in the parenthetical (line 6). Subsequently, Chris resumes the list of his leisure activities based on the parenthetical information (line 7). The parenthetical provides background information for the post-insert list. That is, the list becomes organized consisting of subcategories of sports at the post-insert, whereas the listing was more random in the pre-insert. Moreover, the final *ketun* with H% in the parenthetical serves to provide background information to the upcoming discourse segment so that it bridges the pre- and post-insert (Cf. Park and Sohn, 2002).

Similar to the previous example, the main information requested by the interviewer is halted by the parenthetical and is resumed afterwards. Latching occurs at the transition zone



between the parenthetical and the post-insert. In Figure 4.10, the transition zone is labeled with 3-. While the parenthetical phrase is tonally complete with H%, the lengthening is weak. The last syllable of the parenthetical *yo* in *cohaha-ketun-yo* is lengthened for 0.15-second while the prosodic boundary on *manhi* is lengthened for 0.39-second. Thus, the prosodic boundary occurs after *manhi* rather than between the parenthetical and the post-insert.

Figure 4.10 Transition zone in Example 4.6



The prosodic and syntactic grouping is represented in Figure 4.11.

Figure 4.11 Prosody-syntax mismatch in Example 4.6

{[cohaha-ketun-yo?]<sub>s</sub> # [kulatorye suphochu-to manhi::]<sub>IP</sub> %...]<sub>s</sub>

(I) like (sports), you know so (I do) sports a lot as well

The prosodic boundary occurs at the non-syntactic boundary after *manhi* where a further syntactic unit is projected; the adverb *manhi* projects an upcoming verb. Latching passes the syntactic boundary or possible turn transition place between the two phrases indicated with #. This mismatch enables the speaker to continue the turn until the listing of activities is finished, preventing the interlocutor's uptake.

Example 4.7 shows another advanced speaker's parenthetical and its prosody. Joe was also asked to talk about his hobbies when he has free time.

#### Example 4.7

- 01 Int.: Joe ssi pak- uh paksa kwaceng cwung-i-la  
NAME Mr. Ph- uh Ph.D program in-be-because
- 02 toykey pappu-si-l ke kathay-yo.  
very busy-HN-RL thing seem-POL
- You must be busy with your Ph.D program.**
- 03 J: ney.
- Yes.**
- 04 Int.: kulayto sikan-i com nam-umyen etten il cwulo ha-sey-yo?  
but time-SBJ a.little leave-if which work usually do-HN-POL
- But if you have some free time what do you usually do?**
- 05 J: (...) e::: si- cokum te him-i iss-ul ttay-nun,  
um ti- a:little more energy-SBJ have-RL time-TP
- ...um ti- when I have a little more energy,**
- 06 e mwe pakk-ulo naka-se, mwe sacin-to ccik-ko.  
um what outside-to go.out-and what picture-also take-and
- um I go outside and take pictures and**
- 07 -> e yey sacin ccik-ki-ka ku chwimi-yeyyo.=  
um yes picture take-NML-SBJ that hobby-POL
- um yes. Taking pictures is my hobby.**

08 -> =kulayse. .h e (0.22) thukhi  
so um especially

09 -> cikum eyleyi-ey sal-canh-ayo?=  
now LA-in live-you.know-POL

**so, you know, I live in LA now?**

10 -> =kulayse. .h eyleyi-nun cey kohyang-i  
so LA-TP my hometown-SBJ

**so because LA is not my hometown,**

11 ani-ki ttaymwuney,cey-ka acik an ka po-n cek-i. an ka po-n  
not-NML because I-SBJ yet not go try-RL time-SBJ not go try-RL

**because I have not yet been to. Not yet been to many places,**

12 tey-ka manh-unikka, mwe sikan iss-ul ttay-nun, acik an ka po-n  
place-SBJ many-because what time have-RL when-TP yet not go try-RL

**when I have time, I go somewhere I have not gone to and,**

13 tey-lo ka-se, mwe sacin-to ccik-ko wa-yo.  
place-to go-and what picture-also take-and come-POL

**I go take pictures.'**

((continue to talk about his hobbies))

-----

01 Int.: 조 씨 박- 어 박사 과정 중이라

02 되게 바쁘실 거 같아요.

03 J: 네.

04 Int.: 그래도 시간이 좀 남으면, 어떤 일 주로 하세요?

05 J: (...) 어:: 시- 조금 더 힘이 있을 때는,

06 어 뭐 밖으로 나가서, 뭐 사진도 찍고.

07 -> 어 예 사진 찍기가 그 취미예요.=

08 -> =그래서. .h (0.22) 어 특히

09 -> 지금 엘에이에 살잖아요?=  
10 -> =그래서. .h 엘에이는 제 고향이

11 아니기 때문에, 제가 아직 안 가 본 적이. 안 가본

12 데가 많으니까, 뭐 시간 있을 때는, 아직 안 가본

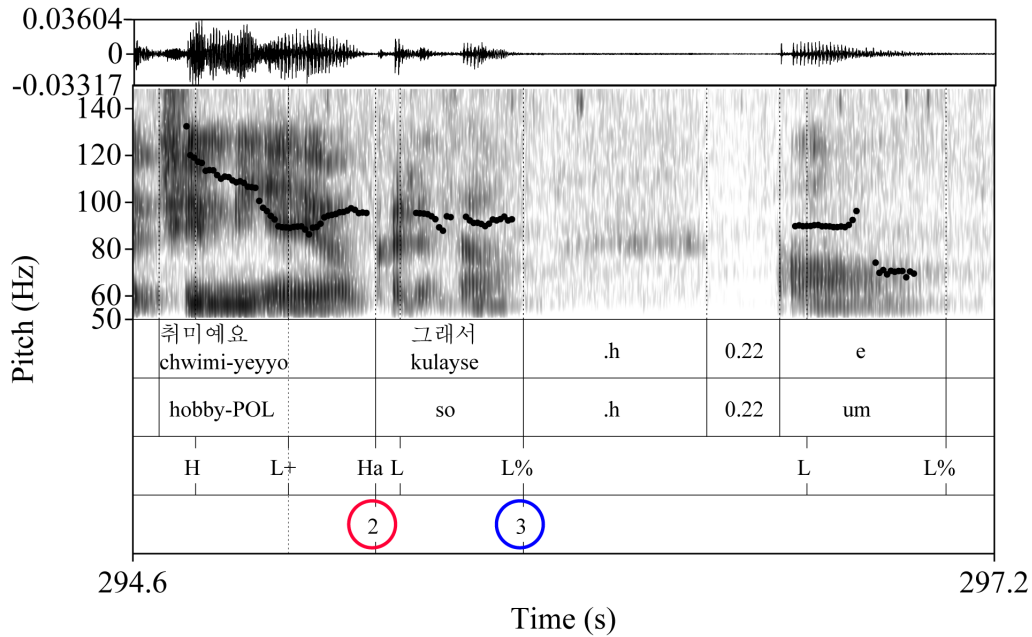
13 데로 가서, 뭐 사진도 찍고 와요.

((continue to talk about his hobbies))

Joe acknowledges that he is busy with his graduate program (line 3) and responds that he likes to take pictures outside when he is not busy (lines 5-7). However, in the parenthetical at lines 8-12, Joe digresses from the main topic, commenting that he has not visited many places in Los Angeles because Los Angeles is not his hometown. This introduces background information for his next comment that he goes to new places in Los Angeles and takes pictures of them. Then, Joe resumes describing his hobbies and specifies the activity using information given in the parenthetical at lines 12-13 (taking pictures of places where he has not gone). The description is resumed with a rephrase of lines 5-6 (underlined). The structure is similar in the rephrase and in the initial pre-insert statement (When I have X, I go to Y and take pictures); X shifts from *him* ‘energy’ to *sikan* ‘time’ in the rephrase; Y shifts from *pakk* ‘outside’ to *an ka po-n tey* ‘place I have not gone.’ In this way, Joe uses information from the parenthetical when rephrasing Y in the post-insert.

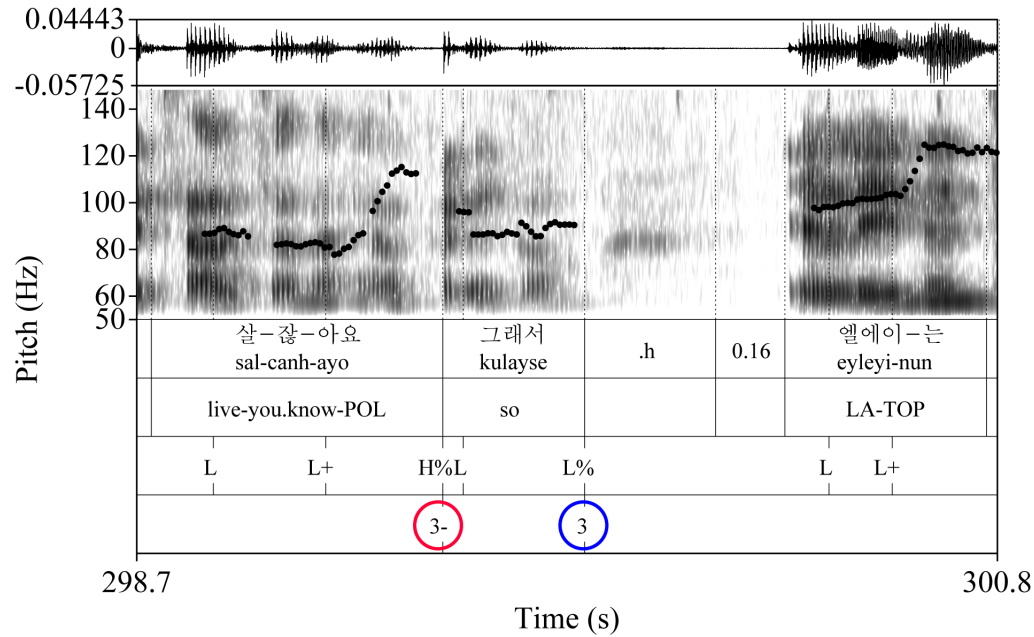
Latching occurs twice 1) between the host and the initial part of the parenthetical in lines 7-8, and 2) between the parenthetical phrases in lines 9-10. The sentence-initial tokens of the conjunction *kulayse* ‘so’ in lines 8 and 10 are prosodically linked to their preceding respective syntactic units. Figure 4.12 shows the first instance of latching, in lines 7-8.

Figure 4.12 Transition zone in Example 4.7 (lines 7-8)



As can be seen, *kulayse* forms one IP with the preceding predicate of the host *chwimi-yeyyo* and is separated from the subsequent filler word *e* ‘um.’ The prosodic boundary occurs after *kulayse* and is marked by L%. The inbreath and the 0.22-second pause also help separate *kulayse* from the rest of the subsequent phrase. The latching pattern for the second instance of *kulayse* is shown in Figure 4.13 (lines 9-10). Similar to the previous instance of latching, the conjunction *kulayse* is prosodically integrated with the preceding phrase while it is syntactically linked to the subsequent phrase.

Figure 4.13 Transition zone in Example 4.7 (lines 9-10)



The predicate *sal-canh-ayo* is tonally complete but ends with weak lengthening; thus, the boundary between *sal-canh-ayo* and *kulayse* is marked with 3-. The prosodic boundary appears after *kulayse* at which an inbreath and a 0.16-second pause take place. Figure 4.14 shows that the prosodic boundary occurs at the non-syntactic boundary, after *kulayse*, and the syntactic boundary occurs before *kulayse*. The mismatch between prosodic and syntactic boundaries enables the speaker to hold the turn until he finishes talking about his hobbies.

Figure 4.14 Prosody-syntax mismatches in Example 4.7

Lines 7-8: {[chwimi-yeyyo]<sub>S</sub> # [kulayse]<sub>IP</sub> % {e} % {thukhi]<sub>S</sub>}<sub>IP</sub>

Lines 9-10: {[sal-canh-ayo]<sub>S</sub> # [kulayse]<sub>IP</sub> % {eyleyi-nun]<sub>S</sub>}<sub>IP</sub>

In the English L2 data for this study, only Korean L2 speakers of English who passed the oral proficiency test used parentheticals and marked the parentheticals prosodically. Speakers who failed the test never used parentheticals nor the prosodic patterns. The syllabus prompt is shown in Chapter 2. L2 speakers often added extra information, which did not appear in the syllabus prompt, in their presentations. Such additional information is analyzed as parentheticals. While in the Korean interview data parentheticals *elaborate* and *enrich* the content of responses by providing extra information for the pre- or post-insert part of the host, in the English syllabus-presentation data they *remind of* or *emphasize* information given in the pre-insert by rephrasing the pre-insert or repeating relevant previously mentioned talk. This is due to the differences between the types of discourse elicited in the Korean and English data. Speakers acting as TAs in the English data used parenthetical inserts to help students remember information that they had already mentioned, similar to teacher discourse. The content of the parenthetical was a repetition of already given talk rather than new information.

In Example 4.8, Jake talks about the times of two midterms (lines 1-4) and one final (lines 5-6) of the course.

#### Example 4.8

01 J: (...) and both midterm exams will be  
 02 -> will start at five pm and end will end at five fifty,=  
 03 -> =so (0.1) both  
 04 midterm exams will be 50-minute exam. yeah.  
 05 and the final exam will be on the final week.  
 06 yeah naturally,

The material in Lines 3-4 is parenthetically inserted, clarifying the duration of the midterms. Jake returns to the main presentation and continues to talk about the final exam starting in line 5. The

conjunction *and* in line 5 functions similarly to *kulayse* ‘so’ in Korean, as a resumptive token which links the current talk to much earlier talk. Jake uses *and* to link pieces of “bullet point” information even though this information is separated by the parenthetical insert. In other words, by means of *and*, information about midterms in the pre-insert is linked to information about finals in the post-insert.

Prosodically, the parenthetical is latched immediately after the pre-insert. As seen in Figure 4.15, *five fifty* of the pre-insert and *so* of the parenthetical are in the same IP, marked by L% and the break index 4. A full prosodic juncture is realized after “so,” with sufficient lengthening and a brief pause.

Figure 4.15 Transition zone in Example 4.8

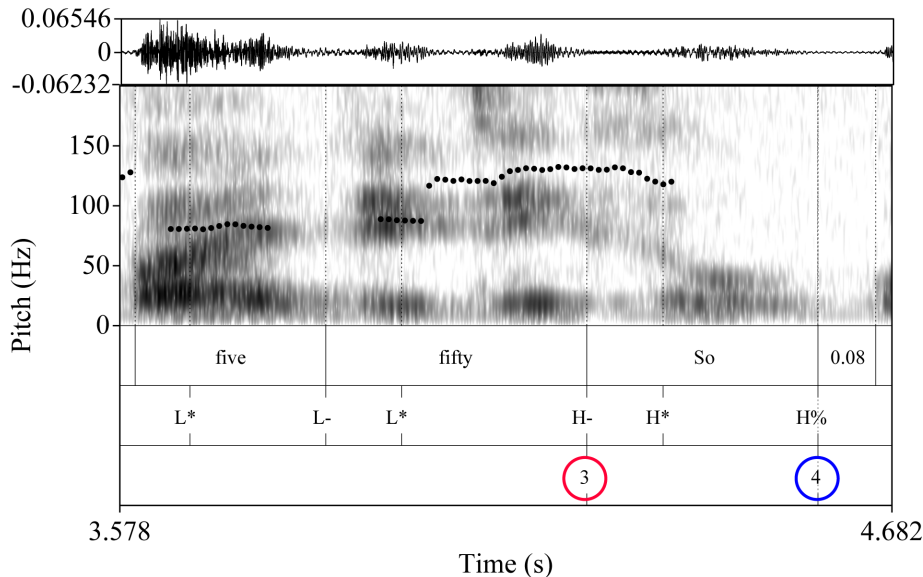


Figure 4.16 illustrates the syntactic and prosodic boundaries. *So* is prosodically integrated into the preceding syntactic unit *five fifty* but is syntactically connected to the following phrase *both midterm exams*.



Figure 4.16 Prosody-syntax mismatches in Example 4.8

{[five fifty]<sub>S</sub> # [so]<sub>IP</sub> % (0.08) {both midterm exams]<sub>S</sub>}<sub>IP</sub>

The syntactic boundary occurs after *five fifty* and the prosodic boundary occurs after *so*. As in the previous examples, the mismatch between the two boundaries enables the speaker to provide additional information and hold the extended turn.

In Example 4.9, Tom talks about when homework is assigned throughout the course.

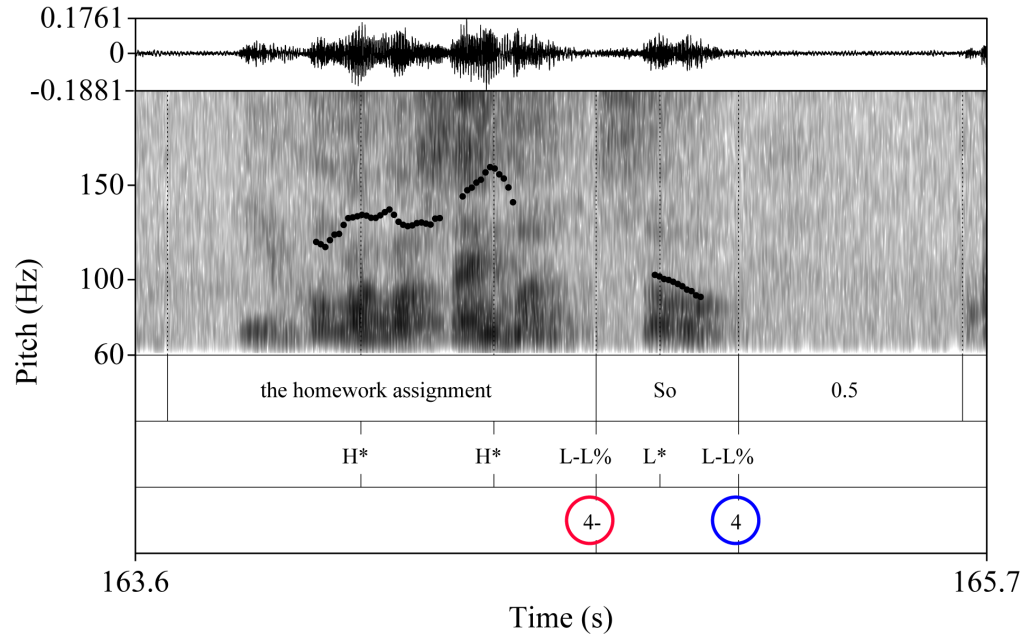
#### Example 4.9

01 T: and each lecture time lecture section uh  
02 -> professor will give you the homework assignment.=  
03 -> =so ah every Monday  
04 Wednesday and Friday will be given uh the homework assignment,  
05 and the due date of the those homework assignment ...

He says that it will be assigned at “each lecture session” in lines 1-2 and clarifies the specific lecture days as “Monday Wednesday and Friday” in the parenthetical in lines 3-4. The information in the parenthetical was previously mentioned in the beginning of the syllabus presentation but is repeated to emphasize the information, i.e., assignment days and lecture days, rather than to elaborate on the previous talk. Starting in line 5, Tom returns to the next main point. The conjunction *and* connects line 5 to the previous main points uttered in lines 1-2.

Figure 4.17 shows the transition zone between the pre-insert host and the parenthetical in lines 2 and 3.

Figure 4.17 Transition zone in Example 4.9



As seen in the figure, the L% after *so* marks an IP boundary and therefore a prosodic boundary appears after *so*. The 0.5-second pause also prosodically separates *so* from the subsequent phrase. At the transition zone between the pre-insert ending *the homework assignment* and the *so* of the parenthetical, the pre-insert phrase is tonally complete with L% yet the lengthening (0.13-second) is not sufficient to be labeled with break index 4; 4- is marked to show the in between degree of disjuncture between 3 and 4. Similar to the previous examples, *so* is prosodically integrated with the preceding phrase while it is syntactically linked to the subsequent phrase. Figure 4.18 represents the prosodic and syntactic boundaries.

Figure 4.18 Prosody-syntax mismatches in Example 4.9

{[the homework assignment]<sub>S</sub> # [so]<sub>IP</sub> % ah]<sub>S</sub>

Example 4.10 shows that the speaker prosodically separates the parenthetical and the host in the transition zone, instead of prosodically integrating the host and the parenthetical. Mike talks about the days of homework assignments, which is the same portion as Example 4.9.

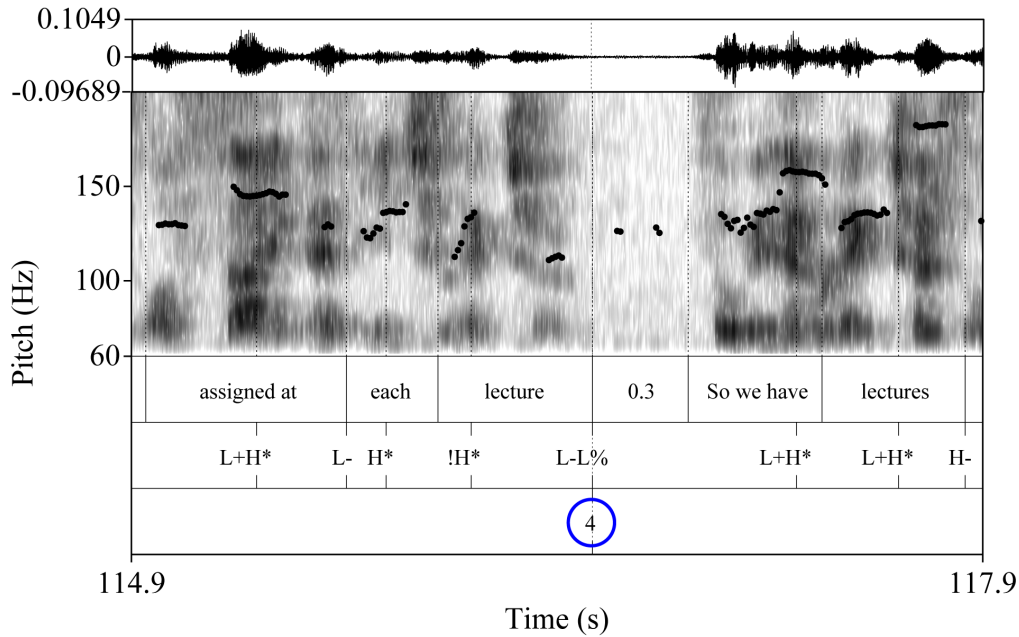
#### Example 4.10

01 M: -> A::nd it is assigned at each lecture.  
02 (0.3)  
03 -> So we have lectures on Monday Wednesday and  
04 -> Friday right?  
05 (0.4)  
06 -> So we will assign homework at each lecture  
07 and it is going to be due  
08 at the next week's Tuesday discussion section.

Mike says that the homework will be assigned at each lecture (line 1) and before moving on to the next main point, in the parenthetical he reminds students of the days of the lectures (lines 3-4). The tag question *right* checks on students' understanding. Starting with line 6, Tom returns to the main presentation by rephrasing line 1 and continuing to explain the next main piece of information, i.e., the homework due date. The passive voice of line 1 (*it is assigned at each lecture*) changes to active voice in the rephrase in line 6 (*we will assign homework at each lecture*).

Figure 4.19 represents the transition zone between the pre-insert host and the initial part of the parenthetical in lines 1-3. The L% after the pre-insert phrase marks an IP boundary, which is tonally complete and lengthened sufficiently (0.29-second). The two phrases are prosodically separated by the 0.3-second pause as well.

Figure 4.19 Transition zone in Example 4.10 (lines 1-3)



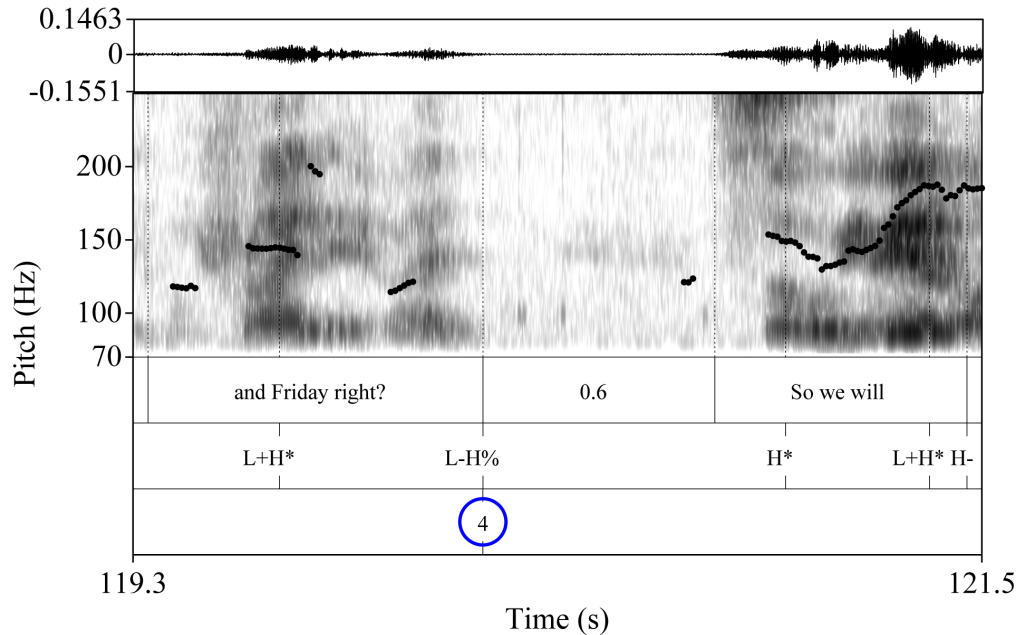
As shown in Figure 4.20, the prosodic boundary occurs at the syntactic boundary.

Figure 4.20 Prosody-syntax mismatches in Example 4.10 (lines 1-3)

{[assigned at each lecture]<sub>S</sub>}<sub>IP</sub> % # {[so we have lectures on Monday Wednesday and Friday right]<sub>S</sub>}<sub>IP</sub>

The second transition zone between the final part of the parenthetical and the post-insert host in lines 4-6 shows another prosodic separation.

Figure 4.21 Transition zone in Example 4.10 (lines 4-6)



In Figure 4.21, the last syllable *right* of the parenthetical marks an IP boundary with the rising tone L+H\* and the 0.24-second lengthening. The 0.6-second pause between the two phrases separates the prosodic units as well. Thus, the prosodic and syntactic boundaries between the phrases coincide between the phrases. Figure 4.22 illustrates the co-occurrence of the boundaries at the transition zone.

Figure 4.22 Prosody-syntax mismatches in Example 4.10 (lines 4-6)

{[and Friday right]<sub>S</sub>}<sub>IP</sub> # % {[so we will assign...]<sub>S</sub>}<sub>IP</sub>

Mismatching between prosodic and syntactic boundaries is not always easy for some L2 speakers.

### 4.3.3 Phonetic features (duration per syllable)

The results have shown that parentheticals are prosodically marked by prosodic integration with the immediately surrounding phrases of the host at the transition zone. Moreover, prosodic integration is often accompanied by a faster pace of the talk. The duration per syllable of IPs at the transition zone including parenthetical phrases was measured and compared to the duration per syllable of IPs at the pre- and post-insert host. Table 4.2 shows the duration per syllable of the IPs at the three positions.

Table 4.2 Duration per syllable of IPs at pre-insert, post-insert, and transition zone

		Pre-insert	Transition zone	Post-insert
Korean	Ex.4.3 (Native)	0.19	0.11	0.14
	Ex.4.5	0.36	0.12	0.27
	Ex.4.6	0.21	0.10	0.27
	Ex.4.7	0.25 0.18	0.15 0.14	0.14
English	Ex.4.4 (Native)	0.27 0.34	0.17 0.19	0.20
	Ex.4.8	0.27	0.24	0.22
	Ex.4.9	0.26	0.20	0.31
	Ex.4.10	n/a (no prosodic integration)		

The duration per syllable during the transition zone tended to be shorter than that in the pre- and post-insert host, indicating that speakers are likely to talk faster in the transition zone than in the pre- or post- insert host. In all instances, the duration of each syllable was shorter in the transition zone than in the pre-insert host, whereas there were some exceptions in the relation between duration in the transition zone and in the post-insert. In Example 4.7, the syllable

duration in the transition zone is longer than or as same as that in the post-insert host. These results show that prosodic integration does not always involve speeding-up of the talk during the transition zone. Only latching merges two phrases into one prosodic unit at the transition zone. Prosodic integration is more a decisive device marking parentheticals than a faster pace of the talk.

#### **4.4 Discussion**

This chapter has shown examples of parentheticals in terms of their sequential positions and phonetic features in discourse data with Korean L2 and English L2 speakers. The analysis showed that L2 speakers in both languages were able to use parentheticals to organize their responses or presentations in a cohesive manner. In the oral interviews with Korean L2 speakers, parentheticals elaborated on the pre- or post-insert phrase in the host by providing additional relevant information. In the syllabus presentations of English L2 speakers, parentheticals rephrased already-mentioned information and emphasized the importance of such information. Speakers did not just talk linearly, but structurally organized responses by inserting parenthetical remarks based on constantly monitoring what had been said or the prediction of what was going to be said. This type of insert is called “pre-emptive self-repair” (Mazeland, 2007) or “a prophylactic to pre-empt the possibility of failure (Schegloff, 2007: 241-242), which prevents an understanding problem that might be raised by the interlocutor due to lack of information and further pre-empts repair that might be initiated by the interlocutor. This fits with the finding that self-repair is preferred over other-repair in natural conversations (Schegloff, Jefferson, and Sacks, 1977). In the Korean L2 data, parentheticals provided much information and detail in the speaker’s current turn and prevented more questions regarding the topic from the interviewer,

which might have come from the interviewer's failure in understanding what the speaker had said. In the English L2 data, speakers used parentheticals to repeat or emphasize important syllabus information or to remind the students of it. The repetition may reduce questions from students regarding the information. Although parentheticals were used differently between Korean and English due to the different discourse situations, in both cases one of the ultimate goals of the parentheticals was to promote better understanding of the current speaker's talk. One interesting difference between native speakers and L2 speakers was the type of transition words used in the transition zone. Whereas native speakers inserted parenthetical information using various transition words (e.g., *kuntey*, *waynyahamyen*, *kulenikka*) or no transition word in the transition zone, L2 speakers were not flexible at producing parenthetical structures using various transition words. Only *kulayse* 'so' in Korean and *so* in English were used in the parenthetical. I will leave analysis of different transition words in parentheticals for future study.

Moreover, the results found characteristic prosodic features during the transition zone either between the final phrase of the host pre-insert and the initial phrase of the parenthetical or between the final phrase of the parenthetical and the initial phrase of the host post-insert. In contrast to previous findings on parentheticals, prosodic integration occurred at both or at one of the transition zones. Speakers merged two separate syntactic units across the host and the parenthetical, and optionally increased the pace of the talk at the transition zone when entering into the parenthetical and/or returning to the host. Break indices weaker than IP (Table 4.1) marked such prosodic merging of the two phrases. This prosodic integration resulted in mismatches between prosodic and syntactic boundaries and enabled the speaker to continue the turn and discouraged the interlocutor from joining in the talk. The results suggest that speakers prosodically distinguish main information in the host and supplementary information in the



parenthetical by speeding up and that they signal a quick return from the parenthetical to the host through the same prosodic maneuver. Moreover, the prosodic manipulations enable the current speaker to continue the turn. While the speaker gives parenthetical information in an extended turn, he/she attempts to maintain the current extended turn by signaling that he/she will be returning soon to the main point. Not only native speakers but also L2 speakers were able to use parentheticals and according prosody to cohesively organize their talk. However, some L2 speakers were less proficient at manipulating prosody but they were able to use parentheticals (Example 4.10). Using parentheticals without prosodic manipulation may cause communication problems because main and supplementary information is not clearly distinguished through prosody (Cf. Levis et al., 2015). Thus, teaching parentheticals and their prosody would help learners to proficiently interact with other speakers without misunderstanding.

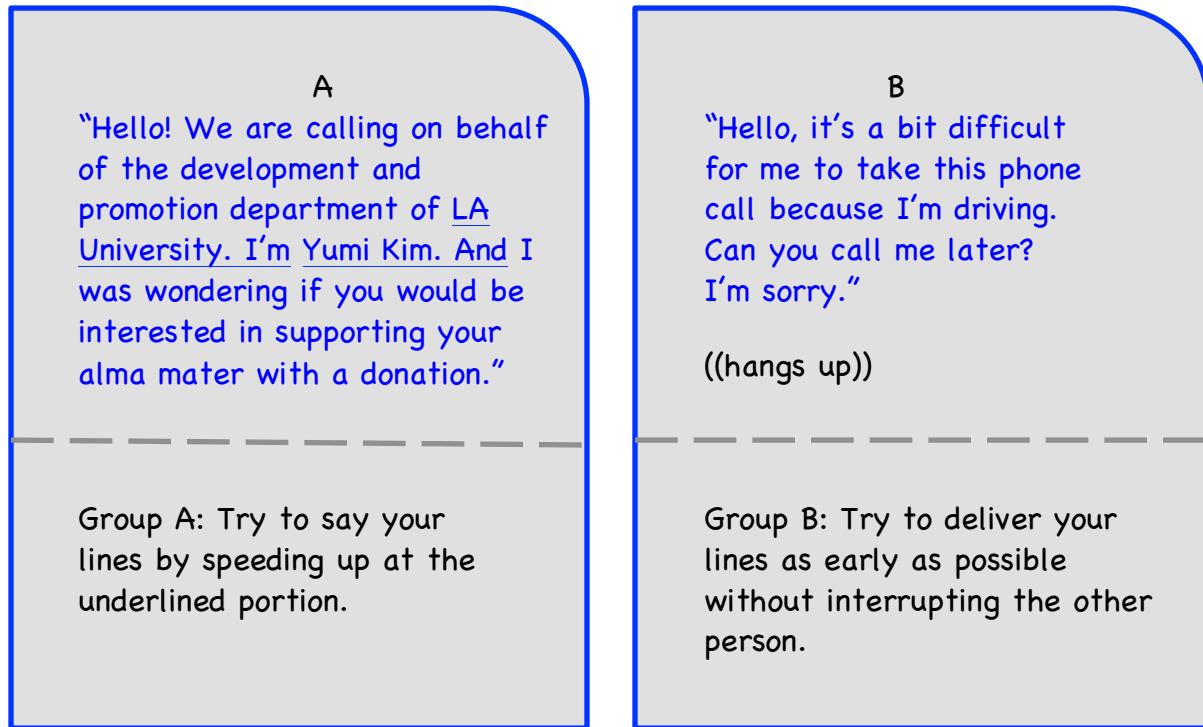
#### **4.5 Teaching implications**

This chapter showed that L2 speakers were able to use prosodic cues to distinguish different information statuses (i.e., main information vs. parenthetical insert) and to signal turn-taking. Words or phrases in the transition zone tended to be produced very fast and were often reduced phonologically (*kuse* or *kuese*). Therefore, it would be useful to have students listen to naturally occurring conversational data which include a portion of talk with phonological reductions and have them transcribe the data. It should be emphasized that students should transcribe these target portions based on their hearing rather than on their orthographic knowledge. Students will be able to realize that native speakers do not pronounce every single syllable in particular contexts. They also will learn how to reduce sounds.

In addition to this perception activity, it is important to know how and when to increase the pace of the talk in parenthetical constructions and to actually produce the phonological reductions. Without this prosodic manipulation, the main information in the host may be less emphasized than the supplementary parentheticals, resulting in misunderstanding and confusion from an interlocutor. Also, L2 speakers may easily end up yielding the turn. For these interactional reasons, it would be useful to teach prosody of parentheticals using discourse data. Although learners may naturally acquire the target prosodic features through authentic interaction with native speakers, it would be useful to provide exercises for those who do not have such opportunities. This chapter introduces two classroom activities.

The first activity is a role-play between two students, suggested by Wong and Waring (2010). The dialogue in the index cards shown in the figure below has been modified to better suit Korean conversational contexts. A is the caller who asks for a donation from alumni. B is the call recipient who turns down the request. A needs to complete reading the request message while B should begin their turn at an appropriate time. The underlined portions in Index Card A should be read at a faster rate of speech.

Figure 4.23 Index card examples for a role-play activity



The teacher makes two sets of index cards for two groups of students (students who call and students who receive the call). The teacher divides the class into two groups. The teacher hands Index Card A to students of Group A and Index Card B to students of Group B. Students in Group A should have a small conversation with all members in Group B based on the index cards. Group A receives one point if the member completes the turn; Group B receives one point if the member does not let members in Group A complete the turn. Students change roles each other: Group A will read Index Card B and Group B will read Index Card A. This activity helps learners practice turn negotiation and also practice speeding up their talk at a possible turn transition place. More advanced speakers may write their own dialogues including parentheticals for practice.

The second activity is dubbing, which may work better for advanced learners because the script is created by students. First, the teacher finds a one to two minute video clip in which speakers are talking with one another, particularly ones showing a lot of lip movements (i.e., fast talk). These videos will be used muted. In case students read the actors' lips and copy the lines for their dubbing, it is better to find a video clip in a different language. For example, the teacher should find English video clips for Korean L2 learners and find Korean video clips for English L2 learners. Second, the teacher asks students write a script including parentheticals and dub over the video clip in the target language. The teacher teaches two types of information (i.e., main and parenthetical) and their prosodic features before the activity. The teacher emphasizes that students should synchronize as best as possible their dubbing with the lip movements of the speaker in the muted clip. By synchronizing lip movements with their recordings, students will be able to learn how to talk fast in a meaningful way and how to maintain their turn before the other speaker interrupts the turn. Through these activities, L2 speakers will learn how to organize their talk cohesively and how to continue an extended turn while preventing the interlocutor's interruption.

#### **4.6 Conclusions**

This chapter examines L2 speakers' parentheticals and the prosodic features of transition zones in Korean and English. The analysis showed that L2 speakers were able to organize their talk cohesively using parentheticals and prosodic integration. The ToBI framework was used to analyze and compare the prosodic integration of parentheticals into hosts in Korean and English. In particular, IPs were effective measures in defining prosodic integration or separation in both languages. Thus, this chapter suggests that the ToBI framework can be a useful tool to analyze

various prosodic features in L1 and L2 discourse across languages. Also, because the ToBI framework is available in various languages<sup>14</sup>, a comparison of target prosodic features between languages would be interesting. Relevant to this study, further analysis of parentheticals and their prosody in various discourse types may help us better understand the characteristics of parentheticals.

---

<sup>14</sup> In addition to English and Korean ToBI systems, a ToBI system is available in multiple languages such as German, Japanese, Greek, Catalan, Portuguese, Mandarin, Cantonese, Binini Gun-wok, Spanish, Bangladesh Bengali, Chickasaw, Serbo-Croatian (see Jun (2005, 2014), Pilar & Roseano (2010)).

## CHAPTER 5

### ACQUISITION OF SECOND LANGUAGE PHONETICS AND PHONOLOGY: WHAT MAKES SECOND LANGUAGE SPEAKERS' SPEECH SOUND FOREIGN?

#### 5.1 Introduction

The previous chapters focused on speakers' manipulation of prosody for interactional purposes (e.g., conveying pragmatic meanings, adding parenthetical information, signaling a turn continuation) in the course of conversational interaction across Intonation Phrases (IPs). This chapter investigates whether and how L2 speakers deviate from the native norm in their production of L2 intonation. The foreign accents or type of errors made by L2 speakers are analyzed based on the ToBI intonation framework. The target prosodic unit for analysis is Accentual Phrases (APs) in Korean and intermediate phrases (ips) in English because foreign accents come from nonnative production of these smaller units, whereas IPs and their boundary tones are more related to speakers' interactional goals. Thus, the target features discussed in this chapter do not necessarily relate to pragmatic meanings or interactional goals.

In section 5.2, AP-initial tone assignments (5.2.1) and AP tonal pattern productions (5.2.2) by Korean L2 speakers are analyzed and errors are described. Section 5.2.1 examines patterns and frequencies of errors in these L2 speakers' AP-initial tone assignment. As mentioned previously, AP-initial tones are determined by the laryngeal features of the AP-initial segment. Lenis segments are assigned a low tone (L) and aspirated or tense segments associated with a high tone (H). Such segment-tone association is automatically and unconsciously achieved by native speakers of Korean unless there is a particular phonological or contextual

condition (Kim, 2004)<sup>15</sup>, but L2 learners are neither aware of such rules nor are skilled at producing such segment-tone interactions across different proficiency levels (cf. Jun & Oh, 1996). Section 5.2.2 discusses how the speakers produce overall AP tonal patterns (THLH). In Korean, when there are four syllables in one AP, the second syllable gets H and the penultimate syllable gets L. In general, the AP-final syllable gets H; this can be overridden by various IP boundary tones. However, English does not have such tonal patterns, which may affect L2 speakers' Korean AP production.

Section 5.3 focuses on the production of pitch accents in English L2 produced by native Korean speakers. Section 5.3.1 examines types of pitch accent assignments on contrastive words and words with new information. In English L+H\* marks the prominence of a contrast, e.g., Did you say TUESday or THURSDay? (Celce-Murcia et al., 1996), and H\* marks newsworthiness (Pierrehumbert & Hirschberg, 1990). In the syllabus presentation, L2 speakers contrasted different test dates (e.g., *first* midterm in *third* week vs. *second* midterm in *seventh* week) and introduced class information, all of which was new to students; the section examines whether L+H\* or H\* is assigned on those contrastive and new pieces of information. Section 5.3.2 analyzes the location of pitch accents, focusing on whether L2 speakers correctly assign pitch accents on content words while not assigning pitch accents on function words.

---

<sup>15</sup> Kim (2004) examined native Korean speakers' production of APs in a read speech corpus and a radio corpus, and found that even native speakers made 4.9% errors for AP-initial H-segment mapping ('Hm') and 6.7% of errors for AP-initial L-segment mapping ('Lm') for phonological and contextual reasons.

## 5.2 Korean L2

102 APs were collected from each of the twelve individual speakers (six intermediate and six advanced) and analyzed (Table 5.1). Among the 102 APs, half (51 APs) begins with lenis segments (e.g., p ‘ㅍ,’ t ‘ㅌ,’ k ‘ㄱ’) and the other half begins with aspirated or tense segments. The 51 APs consist of 17 one- to two-syllable APs, 17 three-syllable APs, and 17 four or more-syllable APs. The following table shows the number of APs for each category per speaker. Since t-tests proved that the number of syllables does not affect the correctness of production ( $p > .05$ )<sup>16</sup>, APs with differing numbers of syllables were collapsed in each category.

Table 5.1 Number of APs for each category per speaker

# of syllables	1-2	3	Above 4	Total
Lenis	17	17	17	51
Aspirated/tense	17	17	17	51
Total	34	34	34	102

The incorrect AP productions consisted of two types of errors. The first was incorrect AP-initial tone assignments (**Type 1**) and the second was the production of AP tones as a pitch accent, transferring English stress-based prosody to Korean (**Type 2**).

The distribution of correct and incorrect AP production is shown in Table 5.2. The distribution of correct and incorrect AP productions out of the total number of APs by six speakers in each proficiency group is shown in Table 5.2. In both groups, there were relatively

<sup>16</sup> At both proficiency levels, the number of syllables of APs was not relevant to the frequency of errors.



large numbers of incorrect AP productions. Also, as expected, intermediate speakers made more errors (34%) than advanced speakers (11%) overall.

Table 5.2  
Proportion of correct and incorrect production out of total APs by proficiency level

	Correct	Incorrect	Total APs
Intermediate	405 (66%)	207 (34%)	612 (100%)
Advanced	546 (89%)	66 (11%)	612 (100%)

The distribution of each error type out of the total number of APs across six speakers in each level is shown in Table 5.3. Intermediate speakers made more Type 1 and Type 2 errors, but the difference between the proficiency levels was significant only for Type 2 ( $t(10) = 2.43624$ ,  $p < .01$ ).

Table 5.3 Distribution of two error types out of total APs by proficiency levels

	Type 1	Type 2	Total
Intermediate	57 (9%)	150 (24%)	612 (100%)
Advanced	31 (5%)	35 (6%)	612 (100%)

Detailed analyses of each error type and discussion of relevant acquisition order follow in subsequent sections.

### 5.2.1 AP-initial tone assignment (Type 1)

In Korean, there is a three-way distinction in manner, especially in laryngeal configuration, among pronunciation of obstruents (stops and affricates). Table 5.4 shows the three-way distinction across the place of articulation.

Table 5.4 Lenis, tense, and aspirated consonants across places of articulation in Korean<sup>17</sup>

	Bilabial	Dental	Postalveolar	Velar	Glottal	Tone
Lenis	p ‘ㅍ’	t ‘ㄷ’	tʃ ‘ㅈ’	k ‘ㄱ’		Low
Tense	p* ‘ㅍ*	t*/s* ‘ㄷ*	tʃ* ‘ㅈ*	k* ‘ㄱ*		High
Aspirated	p <sup>h</sup> ‘ㅍ <sup>h</sup> ’	t <sup>h</sup> /s <sup>18</sup> ‘ㄷ <sup>h</sup> ’	tʃ <sup>h</sup> ‘ㅈ <sup>h</sup> ’	k <sup>h</sup> ‘ㄱ <sup>h</sup> ’	h ‘ㅎ’	High

The initial tone of the Accentual Phrase (AP) is determined based on the phonological, especially laryngeal, features of the AP-initial segment. If the initial segment is tense or aspirated, it gets a high tone, and, for all other sounds, (i.e., lenis consonants, sonorant consonants, vowels), it gets a low tone. In contrast, English stops have a two-way distinction in laryngeal status, i.e., voiced and voiceless, with a voiceless stop realized with either as an aspirated stop (having a long Voice Onset Time (VOT)) or an unaspirated stop (having a zero or very short VOT duration) depending on context (Table 5.5).

<sup>17</sup> In Korean consonants, especially stops and affricates, have this three way contrast but fricatives either have a two way contrast (lenis vs. tense /s/) or no contrast, i.e., /h/.

<sup>18</sup> Cho, T., Jun, S.-A., & Ladefoged, P. (2002) examined acoustic features of /s/ as lenis in Korean.

Table 5.5 Voiced and voiceless consonants across places of articulation in English<sup>19</sup>

	Bilabial	Alveolar	Postalveolar	Velar	Glottal
Voiced	b	d/z	dʒ/ʃ	g	
Voiceless	p	t/s	tʃ/ʒ	k	h

Thus, it is likely that native English speakers have difficulty differentiating the three-way distinction in Korean stops and affricates and they may replace the stops and affricates with English counterparts.

Jun and Oh (2000) found that advanced L2 speakers who were able to meaningfully group prosodic units were not necessarily better at correctly assigning AP-initial tones than less advanced speakers. They proposed that distinguishing AP-initial segments by initial tones (or, F0) seems to be acquired later than is meaningful prosodic grouping. This suggests that such an ability to distinguish sounds by F0 may not be easily acquired for L2 learners. On the other hand, mixed results have been found in studies of first language (L1) acquisition. Where Kim and Stoel-Gammon (2009) showed that children initially acquired VOT to distinguish tense from the other segments and then used F0 to distinguish aspirated and lenis, Jun (2005) found that F0 was acquired before VOT to distinguish the three-way contrast.

In line with the previous studies in L2 acquisition, the current data show that assigning accurate tones for different AP-initial segments is a difficult task for L2 learners at both proficiency levels. Even advanced speakers who fluently manipulate boundary tones for pragmatic purposes close to native norms (Chapter 3) produced non-native-like initial tones, with frequent errors. Their AP-initial tone assignment was not necessarily better than that of intermediate speakers ( $p > .05$ ). In these types of errors (Type 1 error), speakers either

<sup>19</sup> This table only includes the obstruents in English which share the same place of articulation as the obstruents in Korean.

incorrectly assigned H to lenis obstruents, sonorants, or vowels, or assigned L to aspirated or tense consonants. The mismatched H is labeled “Hm” (m for mismatch) and the mismatched L is labeled “Lm”. Table 5.6 shows the proportion of Hm and Lm out of Type 1 errors at each proficiency level.

Table 5.6 Number and percentage of Hm and Lm out of Type 1 errors

	Hm (%)	Lm (%)	Total (%)
Intermediate	17 (30%)	40 (70%)	57 (100%)
Advanced	17 (55%)	14 (45%)	31 (100%)

Table 5.7 shows the proportion of Hm out of the total APs beginning with a L-initial segment and Lm out of APs beginning with a H-initial segment.

Table 5.7 Number and percentage of Hm and Lm out of L-initial APs and H-initial APs

	Hm (%)	L-initial	Lm (%)	H-initial
Intermediate	17 (5.6%)	306 (100%)	40 (13.1%)	306 (100%)
Advanced	17 (5.6%)	306 (100%)	14 (4.6%)	306 (100%)

### 5.2.1.1 AP-initial H-segment mapping (‘Hm’)

Excerpt 5.1 is from an interview with intermediate speaker Jerry. The interviewer asks about Jerry’s daily schedule during the weekend. He begins by describing his weekend schedule in a sequential order.

Example 5.1

01 J: achim-ey thoyoil-ey achim-ey ilena-se a ku okheysutula  
morning-in Saturday-on morning-in wake.up-and ah that Orchestra

02 yensupha-le ka-se twu sikan tongan kuke ha-ko nase e o-myen  
practice-to go-and two hours during that do-and then uh come-if

**In the morning, on Saturday, in the morning, (I) wake up and uh go to practice orchestra; (I) practice orchestra for two hours and then when I come back (home),**

03 mwe yelhan si pan yeltwu si ccum toy-yo.  
what eleven hour thirty twelve hour about become-POL

**the time is about 11:30 or 12 o'clock.**

04 kulayse cemsim mek-ko ku hwu-ey-nun pothong cipan-il-ina  
so lunch eat-and that after-at-TP usually household-chore-or

05 matang-il-ul mwe mech sikan ha-ko e  
yard-work-AC what how.many hours do-and uh

**and then after eating lunch and then (I) usually do household chores or yard work for several hours and uh (...),**

((lines omitted))

07 kacok yaksok iss-ul ttay iss-ko  
family gathering have-RL occasion exist-and

((lines omitted))

09 animyen tatul pappu-myen  
if.not everyone busy-if

10 ce honca mwe chayk ilk-kena yenghwa po-kena e kule-pnita.  
I alone what book read-or movie watch-or uh like.that-DEF

**sometimes (we) have a family gathering and (...) if everyone is busy, I read books or watch movies alone.**

11 (0.3)

12 IR: a kuliko:: pam-ey-nun cenyek-ey-nun::  
ah and:: night-at-TP evening-in-TP

**Ah, and (how is your schedule) at night, in the evening?**

13 J: -> ey cenyek-ey-nun ama aytul-hako kathi

uh evening-in-TP perhaps kids-with together

14 nol-kena yenghwa po-kena.  
play-or movie watch-or

**Uh, in the evening, (I) hang out with my kids or watch movies or,**

15 IR: a ney. a-l-kyess-supnita.  
oh yes know-RL-will-DEF

**Oh, okay. I see.**

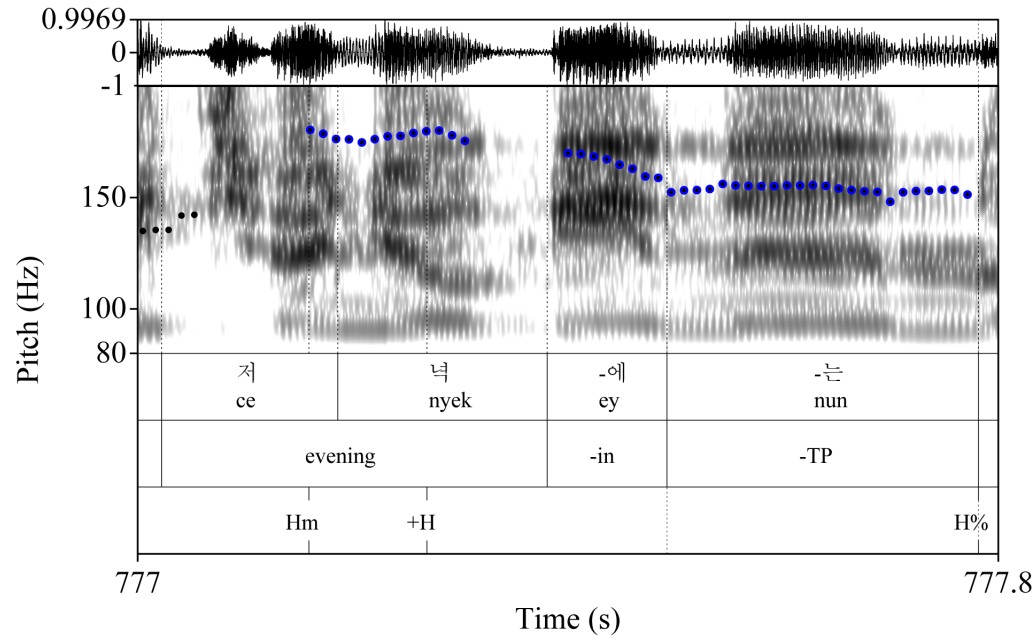
-----

01 J: 아침에 토요일에 아침에 일어나서 아 그 오케스트라  
02 연습하러 가서 두 시간 동안 그거 하고 나서 어 오면  
03 뭐 열한 시 반 열 두 시쯤 돼요.  
04 그래서 점심 먹고 그 후에는 보통 집안일이나  
05 마당일을 뭐 몇 시간 하고 어  
((lines omitted))  
07 가족 약속 있을 때 있고  
((lines omitted))  
09 아니면 다들 바쁘면  
10 저 혼자 뭐 책 읽거나 영화 보거나 어 그렇습니다.  
11 (0.3)  
12 IR: 아 그리고:: 밤에는 저녁에는::  
13 J: -> 에 저녁에는 아마 애들하고 같이  
14 놀거나 영화 보거나.  
15 IR: 아 네. 알겠습니다.

Jerry talks about his morning and afternoon schedule by using specific time expressions, e.g., *achim-ey* ‘in the morning’, *yel han-se pan* ‘11:30 am’ (lines 1-10). However, there is no such temporal indication about the evening schedule, which leads to the interviewer’s subsequent turns after the 0.3-second pause (lines 11-12). When neither Jerry nor the interviewer takes the floor for the 0.3 seconds, the interviewer resumes the conversation by asking a question about the evening schedule. The interviewer acknowledges Jerry’s morning schedule with ‘Oh’, a “state-of-change” token (Heritage, 1984) and solicits Jerry’s continuing description by using *kuliko* ‘and’ and specifying the evening time points *pam-ey-nun* ‘at night’ and *cenyek-ey-nun* ‘in

the evening'. The conjunction *kuliko* enables Jerry to bridge the previously mentioned morning schedule and the upcoming evening schedule. The evening time points marked with the topic particle *nun* provide Jerry with particular topics that need to be described in subsequent turns. Moreover, although the interviewer's talk (line 12) is not grammatically formulated as a question, it functions as a question, eliciting Jerry's uptake. The final syllable *ko* in *kuliko* and *nun* in *cenyek-ey-nun* are lengthened and tonally raised. Jerry, in response, links his subsequent talk to the topic given by the interviewer by recycling the topic phrase *cenyek-ey-nun* 'in the evening' from the question asked previously. The interviewer does not merely ask a question or acknowledge responses but also co-constructs the interviewee's response by providing words syntactically and semantically integrated with Jerry's subsequent answer (Goodwin, 1979). Jerry's *cenyek-ey-nun* (underlined in the excerpt) is illustrated in Figure 5.1 The AP-final syllable's H tone is overridden by the IP-final boundary tone !H% with final lengthening.

Figure 5.1 Hm on /tʃ/ and !H% on topic particle *nun*<sup>20</sup>



Jerry assigns H to the initial lenis /tʃ/ in *cenyek-ey-nun* in which L is the correct tone to be assigned. The tone height is similar to the second +H and is higher than H% realized on the IP-final syllable *nun*. Notice, however, that Jerry knows how to project further talk using H% on *nun* while maintaining the turn. H% projects further elaboration about the evening schedules while also signaling turn continuation. While the intermediate speaker Jerry is not proficient in producing the correct AP-initial tone, he is proficient in managing turn-taking with boundary tones.

Example 5.2 is a similar case of Hm. Intermediate speaker Wes talks about places his family lives.

<sup>20</sup> The high plateau shown in Figure 5.1 is labeled with H% on the last syllable due to the current lack of a labeling convention for the high plateau in the K-ToBI system.



Example 5.2

01 IR: kacok-un mikwuk-ey kyey-si-n-ka-yo?  
family-TP America-in live-HN-RL-Q-POL

**Is your family living in America?**

02 W: -> a kacok-un mikwuk-hako eyl salpatolu-ey iss-eyo.  
uh family-TP America-and El Salvador-in live-POL

**(My) family lives in America and El Savador.**

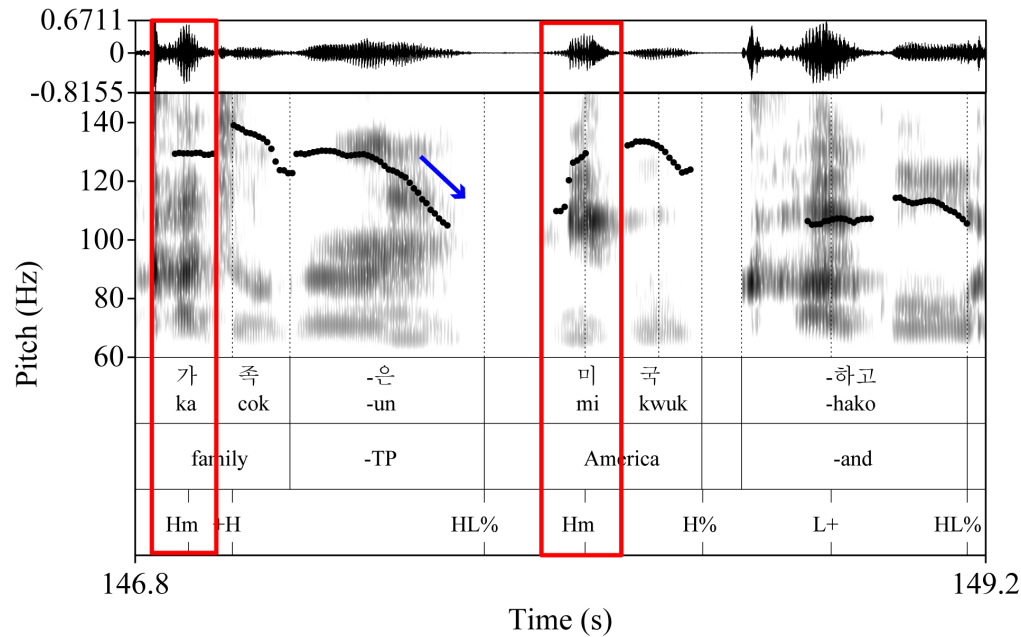
-----

01 IR: 가족은 미국에 계신가요?

02 W: -> 아 가족은 미국하고 엘살바도르에 있어요.

Two APs, *kacok-un* and *mikwuk-hako*, whose final syllable's tone is overridden by IPs, are illustrated in Figure 5.2. AP-initial lenis /k/ and sonorant /m/ are realized with an H tone in which L is expected. On the other hand, here, too, the speaker signals the turn continuation with HL% on the topic particle *-un*.

Figure 5.2 Hm on /k/ and /m/ and HL% on topic particle *un*<sup>21</sup>



As shown in the examples, Hm is assigned either to AP-initial lenis or sonorant segments.

In Hm errors, speakers sometimes replace lenis segments with their aspirated counterparts and raise F0 values accordingly. Example 5.3 shows a tone mismatch in which the speaker produces H on a mispronounced lenis segment. Advanced speaker Lily is an exchange student from the United States. She currently belongs to the *Pungmul* club, a traditional Korean percussion club. Responding to the question asking whether *Pungmul* is fun for her, she explains why it is fun by comparing two types of Korean traditional percussion, *Pungmul* and *Samulnori*.

### Example 5.3

01 IR: pwumwulnoli ha-myen mwe ette-sey-yo ? caymiiss-eyo?  
Pungmul do-if what how-HN-POL fun-POL

**‘How do you like Pungmul? Is it fun?’**

<sup>21</sup> The target APs shown in figures are underlined in the excerpts.

- 02 L: ney. cengmal e caymiiss-eyo. ce-nun e mikwuk-eyse mikwuk  
yes really uh fun-POL I-TP uh America-in America
- 03 e tayhakkyo-eyse samwulnoli tongali-i-ess-**nuntey**[HL%] samwulnoli-wa  
uh university-at Samulnori club-be-PST-nuntey Samulnori-and
- 04 pwulmwulnoli cengmal e talla talla-yo? samwulnoli-nun mwe::  
Pungmul very uh diff different-POL Samulnori-TP what
- 05 mom-ul ssu-ci anha-se e ku kalak-man oywu-myen toy-yo.  
body-AC use-NML not-so uh that melody-only memorize-if fine-POL

**Yes, it is very fun. I used to join the *Samulnori* club in college in America; *Samulnori* and *Pungmul* are very diff- different. For *Samulnori*, you don't have to use your body (don't have to dance) so if you memorize the melody (of the music) you will be fine (playing *Samulnori*)**

- 06 e kuntey e pwungmwul ha-l ttay-nun e  
uh but uh Pungmul do-RL when-TP uh
- 07 mom-to ssu-ko, kalak-to ssu-ko,  
body-also use-and melody-also use-and,
- 08 -> ku **cangtan-un** kapcaki **pakkwu-l** swu iss-unikka  
that melody-TP suddenly change-RL DN can-because
- 09 hangsang e cipcwunghay-ya hay-yo.  
always uh concentrate-must do-POL

**for *Pungmul*, you have to use your body based on the melody. The melody can change suddenly so you have to concentrate always.**

- 10 kulayse pwungmwulnoli-nun cengmal wuntong:: wudong kath-ayo.  
so Pungmul-TP really exercise exercise like-POL

**So *Pungmul* is really like exercise.**

- 11 um e wuntong katha-se e cengmal::  
um e exercise like-so e really
- 12 himtul-ciman samwulnoli-pota te caymiiss-eyo.  
hard-but Samulnori-than more fun-POL

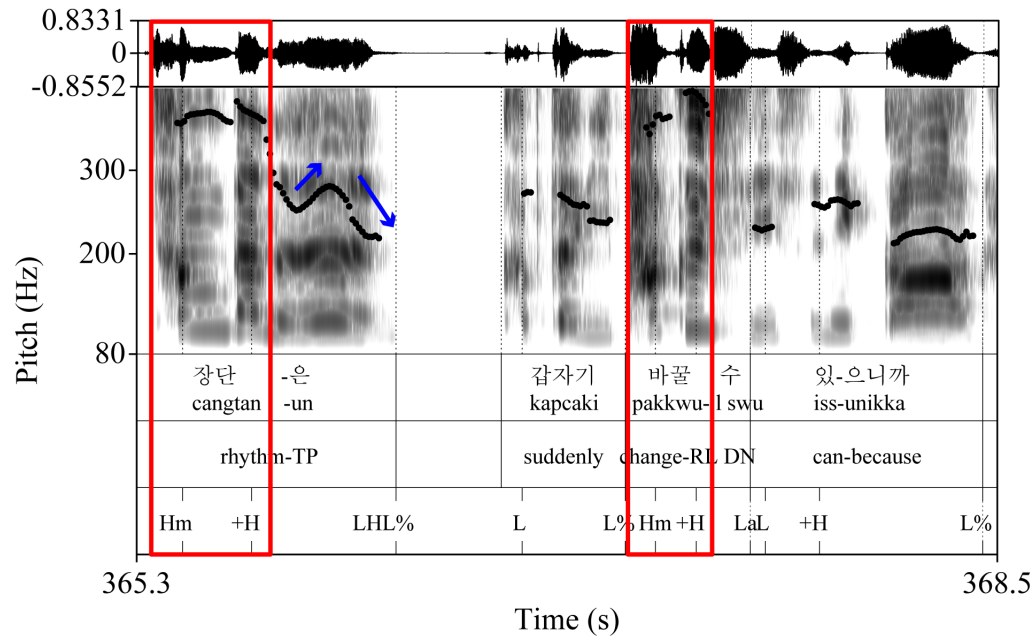
**Um, it is really like exercise so it is hard but more fun than *Samulnori*.**

- 
- 01 IR: 풍물놀이 하면 뭐 어떠세요? 재미있어요?  
02 L: 네. 정말 어 재미있어요. 저는 미국에서 미국  
03 어 대학교에서 사물놀이 동아리였는데[HL%] 사물놀이와  
04 풍물놀이 정말 어 달라-달라요? 사물놀이는 뭐::

05            몸을 쓰지: 몸을 쓰지 않아서, 어 좀 그 가락만 외우면 돼요.  
 06            어 근데 어 풍물할때는 어:  
 07            몸도 쓰고, 가락도 쓰고,  
 08            -> 그:: 장단은 갑자기 바뀔 수 있으니까  
 09            항상 어 집중해야 해요.  
 10            그래서 풍물놀이는 정말 운동:: 운동같아요.  
 11            음:: 어:: 운동:같아서 어 정말::  
 12            힘들::지만 사물놀이보다 더 재밌어요.

When Lily produces the phrase *cangtan-un* ‘as for rhythm’ at line 8, the lenis /tʃ/ is produced similarly to aspirated /tʃ<sup>h</sup>/ and is assigned H. Likewise, the /p/ in *pakkwu-l swu iss-unikka* ‘can change’ is an aspirated /p<sup>h</sup>/ and is assigned H. Figure 5.3 illustrates the pitch contour of the phrase.

Figure 5.3 Hm on mispronounced lenis /tʃ/ and /p/



As can be seen, the AP-initial tone is as high as the second +H. The tone-segment association is correct but the error comes from the replacement of lenis with its aspirated counterpart. The incorrect pronunciation may not interfere with the flow of conversation because the interlocutor may infer the meaning from the context, but the mispronunciation may be stigmatized as a non-native accent, which would never appear in native speakers' talk. Notice that Lily is able to use LHL% on the topic particle *-un* and signal a turn continuation.

### 5.2.1.2 AP-initial L-segment mapping ('Lm')

Conversely, there are instances in which speakers mistakenly produce L on initial aspirated or tense segments. Example 5.4 is an interview with intermediate speaker Wes. The interviewer asks why Wes decided to go to Korea to teach English and Wes responds that his employer, a private institute in Korea, provided him with an airplane ticket and rent.

#### Example 5.4

01 IR: hankwuk-ey-nun way ka-key toy-si-ess-eyo?  
Korea-to-TP why go-AD become-HN-PST-POL

**Why did you go to Korea (to teach English)?**

02 W: -> a sasil-un hakwen-un oykwukin sensayngnim-tul-eykey  
ah actually institute-TP foreign teacher-PL-to

03 pihayngki phyo-hako a I guess cachwuy pang leynthu sa cwe-yo.  
Air:plane ticket-and ah I guess rented.room rent buy give-POL

**Ah, actually, the private institute in Korea provides foreign teachers with airplane tickets and rent.**

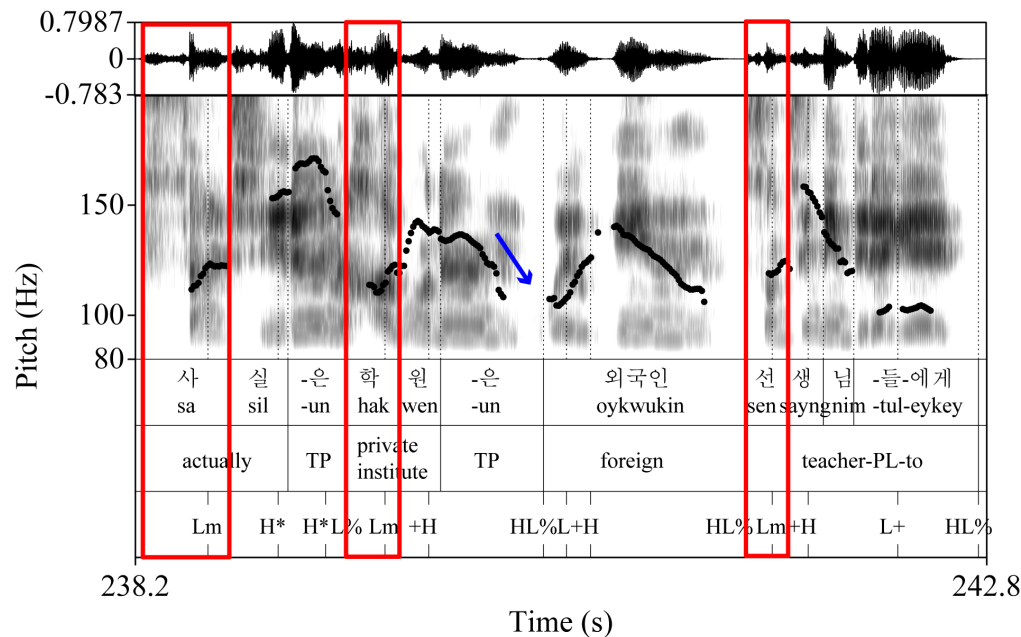
-----  
01 IR: 한국에는 왜 가게 되셨어요?

02 W: -> 아 사실은 학원은 외국인 선생님들 에게

03 비행기 표하고 아 I guess 자취방 렌트 사줘요.

Figure 5.4 shows the pitch contour of the four APs in line 2, three with initial aspirated segments and one initial lenis segment. Therefore, there should have been three APs beginning with H and one with L; the actual production in the figure shows that all of the APs begin with L, including three Lm. Only the third AP *oykwukin* ‘foreign’ gets L correctly.

Figure 5.4 Lm on /s/, /h/, and /s/ and HL% on topic particles *un*



On the other hand, it is interesting that Wes knows how to continue the turn by using HL% on the topic particle *-un* in *hakwen-un* ‘private institute-TP’ (arrowed).

Advanced speakers make similar errors. In Example 5.5, advanced speaker Tim compares people in his hometown, New York City, and the place he is currently living, Honolulu. The excerpt focuses on describing people in New York who lead busier lives than people in Hawaii. Tim describes people in New York as only concerned with themselves compared to people living

in Hawaii; however, he says that he understands that their self-centeredness is due to New York's busy lifestyle and assures that they are good people.

Example 5.5

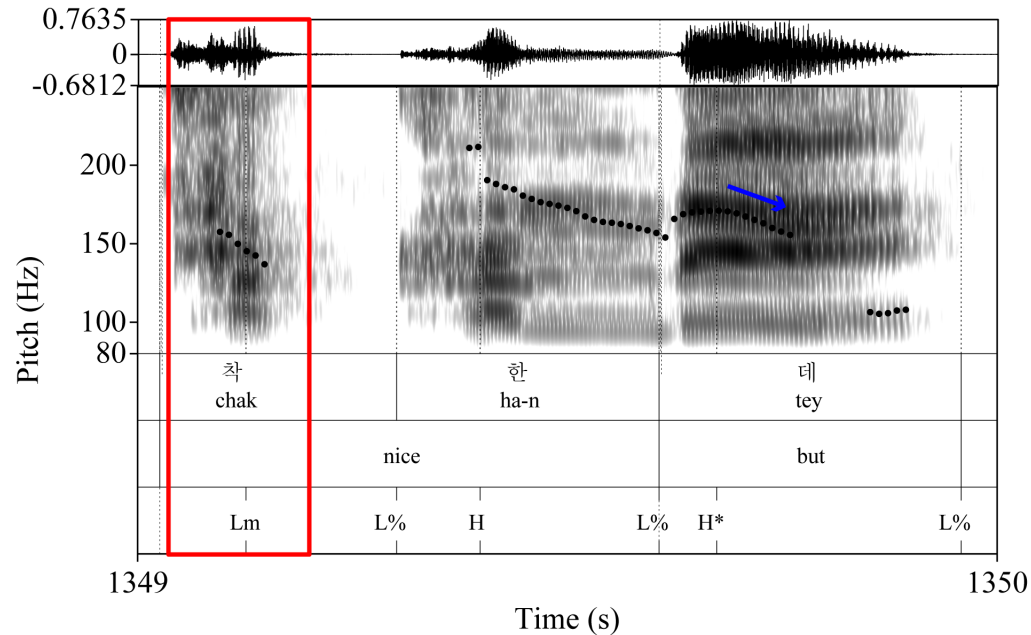
- 01 T: keki-ey sa-nun salam-tul-i yoki-ey sa-nun salam-tul-pota  
 there-in live-RL person-PL-SBJ here-in live-RL person-PL-than
- 02 -> com te pappukey sal-ayo. kulayse nwuyok salam-tul-un a **chakha-ntey**  
 a.little more busy live-POL so New.York person-PL-TP ah nice-but
- 03 pappukey sal-ta-po-nikka  
 busy live-DC-try-so
- 04 caki-man sinkyeng-ul ssu-ko caki-ui il-ul-man hay-yo.  
 self-only care-AC take-and self-POSS work-AC-only do-POL

**People there (New York City) are a little more busy than people here (Hawaii). So people in New York are nice but as they are busy (...) they only take care of themselves (they don't think about what others think or do).**

- 
- 01 T: 거기에 사는 사람들이 요기에 사는 사람들보다  
 02 -> 좀 더 바쁘게 살아요. 그래서 뉴욕 사람들은 아 **착한데**  
 03 바쁘게 살다 보니까  
 04 자기만 신경을 쓰고 자기의 일을-만 해요.

Figure 5.5 shows the pitch contour of *chakha-ntey* ‘nice but.’ The phrase is realized across three Intonation Phrases (IPs), ending with boundary tones (%). The first IP beginning with the aspirated /tʰ/ in *chak* is produced with L, though H needs to be assigned. On the other hand, the last IP (*n)tey* is realized with an HL pitch contour consisting of H\* and L%, marking background information about positive characteristics of people in New York as context for the upcoming talk about negative characteristics of people in New York. While Tim is able to mark the background information with *-ntey*, cuing the upcoming talk with an HL contour, he does not correctly assign the AP initial tone.

Figure 5.5 Lm on /tʃ<sup>h</sup>/ in the initial syllable *chak*



This section showed that speakers at both levels did not have native-like proficiency at manipulating pitch (or, F0) to distinguish the three-way contrast. Initial lenis and sonorant segments were sometimes assigned H or aspirated and tense segments were assigned L. Why are these errors prevalent in L2 speakers' speech? One possible reason is that the laryngeal contrast is not clearly comparable between Korean and English, yet they share some similarities: as mentioned earlier in this chapter, English stops have a two-way contrast by Voice Onset Time (VOT) and Korean has a three-way contrast by VOT and F0. Considering that the speakers' L1 is English and the two-way distinction is distinguished only by VOT, it would not be easy to contrast the Korean three-way features using tonal cues (Chang et al., 2011). Acquisition order may also explain the relatively poor production of AP-initial tones. Previous studies proposed that phonetic features are acquired later than phonological features, which affect meaning changes (Jun & Oh, 1996).



The current data support this research finding, showing that speakers who are able to signal turn continuation with appropriate boundary tones are unable to assign AP-initial tones appropriately. That is, speakers acquire the usage of a boundary tone to cue discourse continuation earlier than when they acquire AP-initial tone assignment, which is irrelevant to meaning. In daily life, by interacting with other speakers, Korean L2 speakers constantly deal with the negotiation of pragmatic meaning and refine their use of prosodic features to be more meaningful and communicative. On the other hand, tone-segment mappings are not corrected by others because they do not interrupt the flow of meaning negotiation. The other speakers may consider the speaker an L2 learner and may not expect native-like production of such laryngeal features as long as the conversation goes smoothly. In addition, native speakers who are not trained in linguistics may not even notice mismatches of tone-segment contrast during conversation. They may merely consider the mismatch to be a foreign accent transferred from the speaker's L1. Furthermore, the three-way distinction of Korean laryngeal features by F0 is rarely taught in language classrooms. Some knowledgeable teachers may briefly point out the difference in pitch. However, it does not seem that there is enough practice or feedback provided for the laryngeal distinction in the classroom, whereas grammar or vocabulary receive far more attention from the teacher. Teaching and providing feedback on the three-way distinction by f0 has been known to lead to better production by L2 learners. For example, Park (2009) found that teaching F0 of lenis and aspirated consonants enhanced L2 speakers' ability to distinguish and produce the sounds.

### 5.2.2 AP tonal patterns (Type 2)

The second type of error occurs when L2 speakers incorrectly assign stress when producing Korean AP tonal patterns (THLH, T=L or H). When producing Korean APs, the Korean L2 learners in the study often partially or fully transferred English stress patterns. There has been much research showing the acquisition of English stress rules by speakers from various L1 backgrounds; few studies focus on the transfer of English stress rules into L2 production. Before analyzing examples, Korean tonal patterns will be briefly explained in comparison to English stress patterns. As mentioned in Chapter 2, Korean intonation structures consist of AP tonal patterns (LHLH or HHLH). The initial tone is either L or H depending on the laryngeal feature of the initial segment. When the AP has four or more syllables, the second syllable is realized with H and the penultimate and final syllables are realized with L and H respectively. When the AP has three or fewer syllables, the intermediate H or L can be omitted and the final H is realized on the final syllable, resulting in LHH, LLH, LH tonal patterns. The AP final tone H is overridden by the IP-final boundary tone if AP is the last AP of the IP (in that case, the IP-final AP would be realized with all tones of the AP except for the AP-final tone, e.g., LH-LHL%, LHL-HL%). The IP-final syllable is substantially lengthened and is followed by an optional pause.

English intonation, on the other hand, consists of pitch accents that are assigned to the stressed syllable of prominent words, followed by a phrase accent and an IP-final boundary tone, which is realized on the IP-final syllable. As in Korean, the IP-final syllable is substantially lengthened. Each stressed syllable in English is not assigned a pitch accent; rather, only stressed syllables of prominent words get pitch accents. In addition, the type of pitch accent (e.g., H\* or L\* or L+H\*) is determined by the discourse status of the pitch-accented item, and the type of

boundary tone is determined by the sentence type and relation between adjacent ips and IPs. Pitch-accented words are intonationally more prominent than stressed syllables without pitch-accents. That is, the H and L are not assigned based on laryngeal features of the initial segment but assigned based on contexts. For example, H\* is realized to mark new information, typically shown in statements, and L\* marks prominence in questions (Pierrehumbert & Hirschberg 1990). English has two prosodic units higher than a word, an Intermediate Phrase (ip) and an Intonational Phrase (IP). The right edge of an ip is marked with a phrase accent (i.e., H-, L-) and the right edge of an IP is marked with a boundary tone (i.e., H%, L%).

Type 2 errors show unique patterns mixing Korean and English. For example, the AP-initial syllable is stressed with English pitch accents and the final syllable is realized with Korean boundary tones. In bilingual studies, Grosjean (1989) suggests that the “mixing” of the L1 and L2 is unavoidable by bilinguals because the two languages interact with one another in the speakers’ language system or interlanguage. This “language mixing” appears in the current L2 speakers’ data as well. Speakers often follow Korean tonal patterns while employing English pitch accents that transfer English stress patterns. Some productions lead to ambiguity in labeling between L1 and L2. The present analysis identified three mixed patterns, all involving English pitch accents:

- 1) English pitch accents + Korean boundary tones
- 2) English pitch accents + Korean second H
- 3) Korean AP-initial tones + English pitch accents

In the analysis, realizing H\* on lenis or sonorant initial syllables is incorrect in two ways: 1. It violates tone-segment mapping (Type 1) and 2. It produces a stress incorrectly (Type 2). In this case, only the second violation produced by H\*, i.e., producing an English stress-like H tone, is considered and the error is coded as Type 2. Type 1 errors only include errors that have been filtered out from Type 2 criteria. That is, Type 1 errors are considered to be the first type of violation only, i.e., if they violate tone-segment mapping only without involving an accompanying English stress-like H.

### 5.2.2.1 English pitch accents + Korean boundary tones

Example 5.6 shows a combination of English L\* and Korean H%. Advanced speaker Mike talks about his daily schedule during the week.

#### Examples 5.6

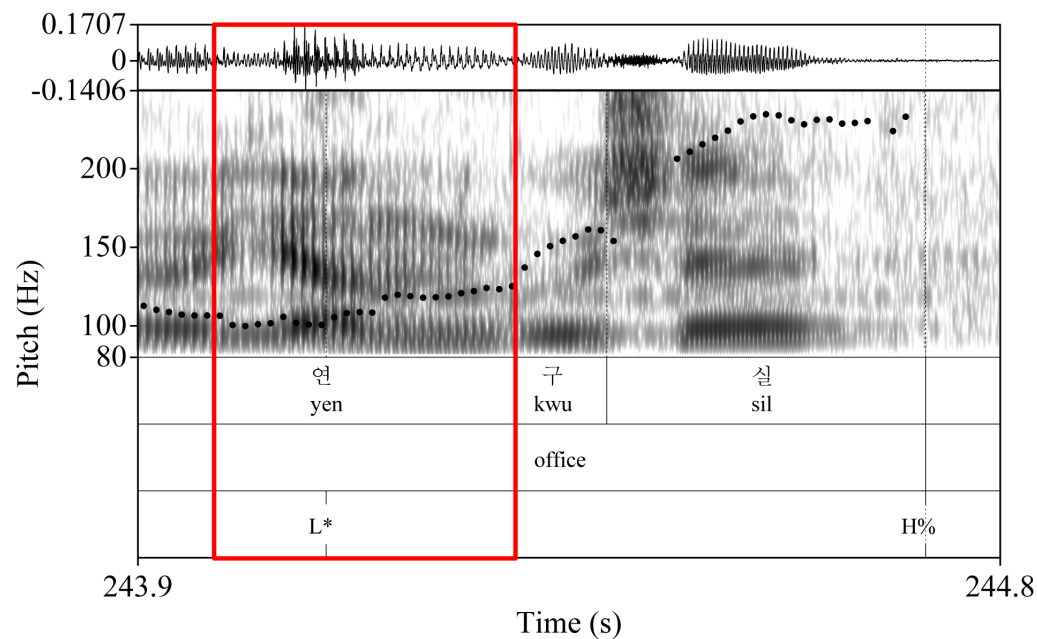
- 01 M: (...) yetelp si pan-puthe yeltwu si pan-kkaci  
 eight o'clock half-from twelve o'clock half-until
- 02 -> ku cehuy thieyi cokyo **yenkwusil**? mwe cokyo kongpwusil-eyse  
 that our TA assistant office what TA studying.room-in
- 03 cwulo kongpwu-na yenkwu-lul kantanhakey ha-ko,  
 usually study-or research-AC briefly do-and
- 'From 8:30 to 10:30, I usually study or do research briefly in our TA office? um in the TA study room and,'**

-----

- 01 M: (...) 여덟 시 반부터 열두 시 반까지  
 02 -> 그 저희 티에이 조교 **연구실**? 뭐 조교 공부실에서  
 03 주로 공부나 연구를 간단하게 하고,

When referring to the Teaching Assistant (TA) office in Korean, Mike repairs his own word choice from TA “office” *yenkwusil* to TA “study room” *kongpwusil* (line 2); seemingly, he does not know the appropriate word for TA office in Korean. The repair initiation is produced in a rising contour consisting of L\* assigned to the initial syllable *yen* and H% on the final syllable. The rising contour solicits information from the interviewer and is used to resolve the repair. Figure 5.6 shows the contour realized on *yenkwusil*.

Figure 5.6 L\*H% contour of *yenkwusil*



The stressed L\* is evidenced by the longer duration, which is bigger than that of the second syllable.<sup>22</sup> The rising contour could be a reflection of the question boundary tone (H-H%) in English but it is labeled with Korean H% because it is evident that the speaker intended to speak in Korean and produce Korean intonation.

<sup>22</sup> The duration of the pitch accented syllable *yen* is 0.25 seconds, which is more than twice the length of the following syllable *kwu*, lasting 0.09 seconds.

### 5.2.2.2 English pitch accents + Korean second H

Examples 5.7 and 5.8 present the employment of English pitch accents, a second +H and boundary tones in Korean. Previous to the following excerpt, advanced speaker Mike has compared Washington D.C., his hometown, with Los Angeles, the city he currently lives in. He said Washington D.C. is a small city where people know each other very well compared to Los Angeles. Example 5.7 shows excerpted lines describing Los Angeles. Mike says Los Angeles is a big city where people from diverse cultural backgrounds live together, cultivating their own distinctive cultures within the city. Thus, each neighborhood in Los Angeles has its special cultural environment (e.g., Korea Town, the Spanish community).

#### Example 5.7

01 M: eti ka-tunci molu-nun salam-tul-i ta iss-ko,  
where go-whether not.know-RL person-PL-SBJ all exist-and

**In LA, wherever you go, there always are people you don't know**

02 -> solcikhi e eyleyi-nun tongney-mata thukpyelha-n thukcengha-n  
frankly um LA-TP neighborhood-each special-RL particular-RL

03 mwunhwa-ka iss-nun ke kath-ayo.  
culture-SBJ exist-RL thing like-POL

**and frankly speaking, in LA it seems that each neighborhood has its special particular culture.**

((lines omitted))

06 mwe i tongney ka-myen, com supheyincek-i-n mwunhwa-lul  
what this neighborhood go-if a.little Spanish-be-RL culture-AC

07 maspo-l su iss-ko, mwe talu-n tongney ka-myen,  
taste-RL DN can-and what different-RL neighborhood go-if

08 mwe hankwuk thawun iss-canh-ayo.  
what Korea town exist-you.know-POL

**For example, if you go to this neighborhood, you can taste Spanish culture and, if you go to a different neighborhood, for example you know there is Korea Town.'**

-----

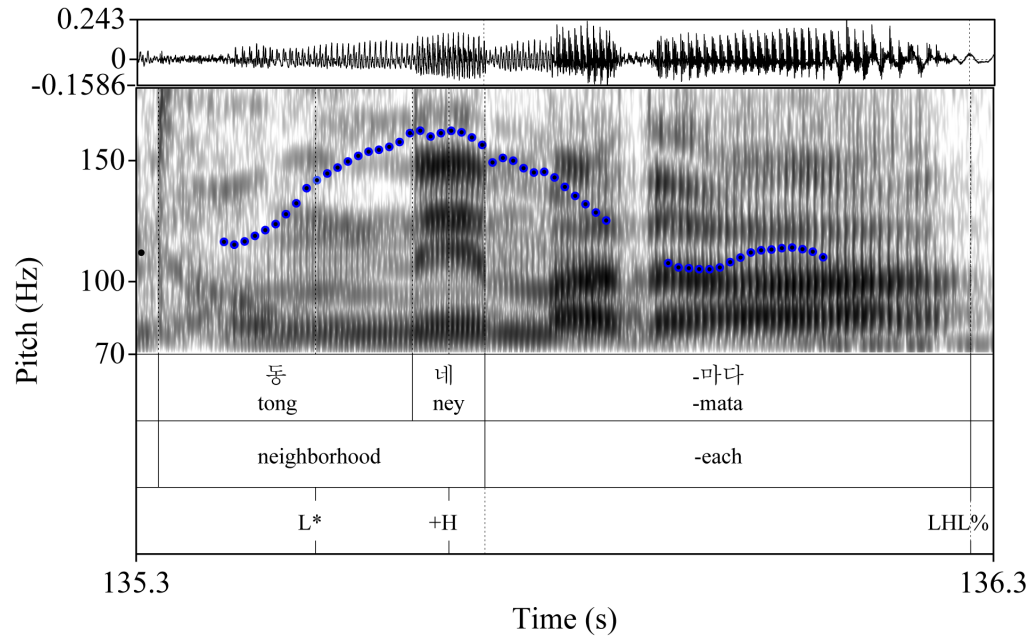
- 01 M: 어디 가든지 모르는 사람이 다 있고,  
02 -> 솔직히 어:: 엘에이는 동네마다 특별한 특정한  
03 문화가 있는 거 같아요.  
((lines omitted))  
06 뭐 이 동네가면, 좀 스페인적인 문화를  
07 맛볼 수 있고, 뭐 다른 동네에 가면,  
08 뭐 한국타운 있잖아요.

Figure 5.7 shows pitch contour of *tongney-mata* 'each neighborhood' (line 2). The initial syllable *tong* is produced with L\* of English, lasting longer than the following syllable *ney*<sup>23</sup> while the IP-final is marked with the Korean boundary tone LHL%. The second syllable *ney* gets Korean +H.

---

<sup>23</sup> The duration of the first syllable *tong* is 0.3 seconds and that of the subsequent syllable *ney* is 0.08 seconds.

Figure 5.7 L\* and +H in *tongney-mata*



In Example 5.8, the interviewer asks Paul to introduce a friend he met in Korea and Paul talks about his friend *Heejin*.

Example 5.8

01 P: a ku chinkwu ilum-un ku wenhucyin.  
um that friend name-TP that NAME

**Um my friend's name is Heejin Won.**

02 IR: a.  
**Oh I see.**

03 P: -> wenhucyin ku:: **wenkyangtay-eyse** manna-ss-eyo. ku chinkwu-nun cikum  
NAME that NAME-at meet-PST-POL that friend-TP now  
**Heejin Won. I met her at Wonkwang University. She now does (...).**

01 P: 아 그 친구 이름은 그 원희진.

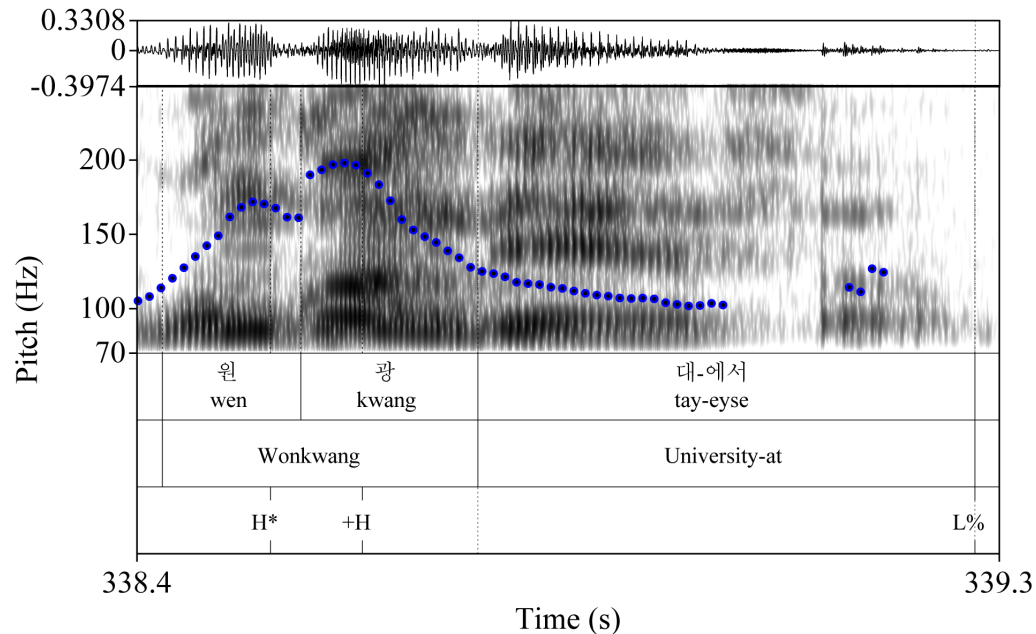
02 IR: 아.

03 P: -> 원희진 그:: **원광대에서** 만났어요. 그 친구는 지금 (...)



Paul introduces his friend's name at line 1 and tells the place he met her at line 3. The name of the place *wonkwangtay-eyse* 'at Wonkwang University' is produced with a mixture of Korean and English stress.

Figure 5.8 H\* and +H in *wonkwangtay-eyse*



The initial syllable *wen* gets English H\* and the second syllable *kwang* gets Korean +H on the second syllable. The H\* is realized with the high intensity and a high F0 on the first syllable. The F0 of the second syllable is also H, and even higher than the first syllable. This shows that the speaker is attempting to produce the THLH (T=L or H) tonal pattern by producing H on the second syllable while producing H\* on the first syllable. Paul knows Korean tonal patterns but does not seem to know how to produce syllables with even weight without stressing one.

### 5.2.2.3 Korean AP-initial tones + English pitch accents

The last mixed pattern is the combined use of Korean AP-initial tones and English pitch accents. Intermediate speaker Paul narrates one of his interesting experiences in Korea. Previously, he said that he once took a taxi with his friend on their way back home; then, he describes the taxi driver as a crazy man. The driver drove the taxi extremely fast and ended up having a car accident. In the excerpt, the driver yelled at Paul and his friend while demanding his taxi fee.

#### Example 5.9

01 P: -> **wuncensa-ka** ya ton cwu-eya tway-yo. cwu-la-ko yaykiha-ss-eyo.  
driver-SBJ hey money give-must become-POL give-DC-QT talk-PST-POL

**The taxi driver said that “hey, you must pay the fare!”**

02 ton mwe-ci? ku like the taxi fee. ku cwu-la-ko yaykiha-ss-eyo.  
money what-COMM that like the taxi fee that give-DC-QT talk-PST-POL

**What is taxi fees in English? Like the taxi fee. He said to give him (the taxi fee).**

03 chinkwu-ka nemwu hwa-ka na-ss-eyo.  
friend-SBJ very anger-SBJ become-PST-POL

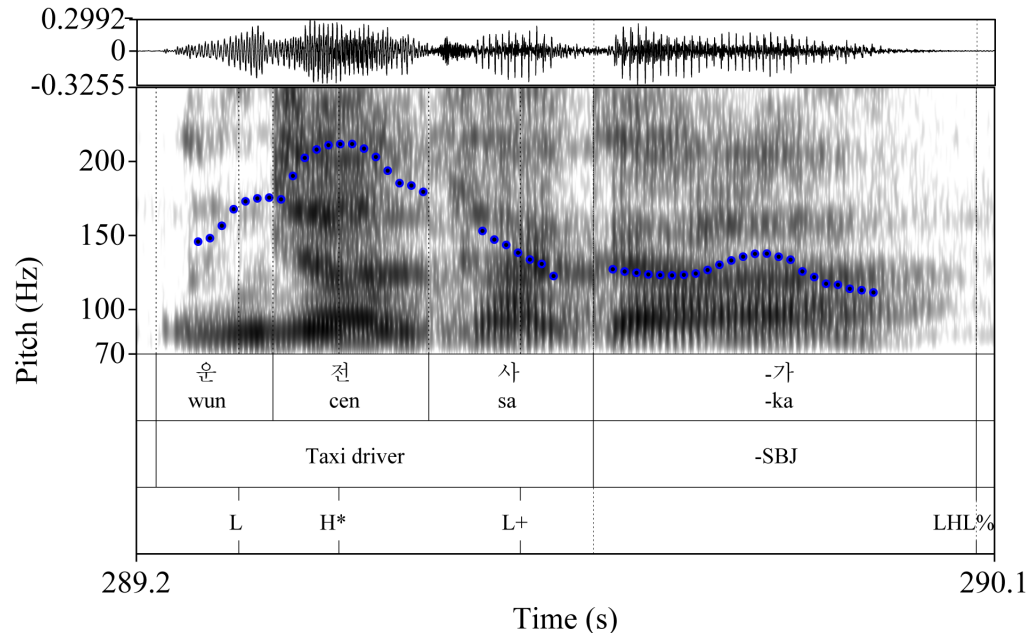
**My friend was very angry.**

---

01 P: -> 운전사가 야 돈 줘야 돼요. 주라고 얘기했어요.  
02 돈 뭐지? 그 like the taxi fee. 그 주라고 얘기했어요.  
03 친구가 너무 화가 났어요.

When reporting the taxi driver’s talk, the mixed intonation pattern appears in line 1 in the following figure.

Figure 5.9 Pitch contour of *wuncensa-ka*



The IP *wuncensa-ka* is produced with the Korean tonal contour, i.e., LHL with LHL%. However, notice that the second H is not a +H but is a pitch accented H\* with high pitch and intensity. Moreover, the vowel /e/ in *cen* is louder and more prominent than the following low vowel which has a higher intensity intrinsically.<sup>24</sup> This is the only example that satisfies the Type 1 criteria but violates Type 2 while the rest violate Type 2 and also automatically violates Type 1.

These examples show a mixture of English pitch accents and Korean AP tonal patterns.

The mixture illustrates speakers' interlanguage, which belongs to neither L1 nor L2.

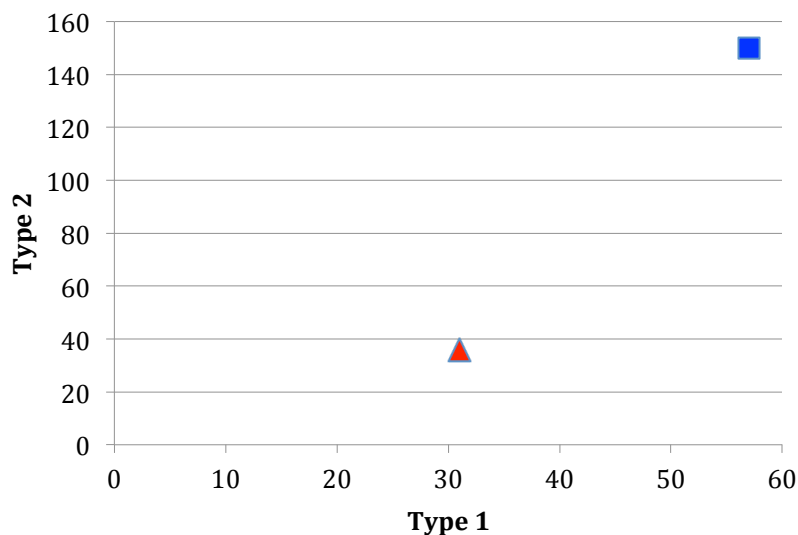
### 5.2.3 Conclusion and discussion of 5.2

Section 5.2 focused on describing errors in 1) AP-initial tone assignment and 2) AP tonal patterns. Korean L2 speakers of English tended to assign L to AP-initial aspirated or tense

<sup>24</sup> The intensity of the second syllable *cen* (74 dB) is higher than that of the following syllables *sa* (68dB).

segments (Lm cases), or assign H to AP-initial lenis or sonorant segments (Hm). Moreover, three types of mixed examples of Korean and English were analyzed. L2 speakers employed English pitch accents when producing Korean AP tonal patterns. Speakers showed attempts to maintain Korean tonal patterns yet English pitch accents were not reduced. They transfer L1 feature partially, i.e., pitch accents. Based on these findings, L2 speakers need to acquire Korean-specific tone-segment mapping rules and need to cease employing the English-specific stress and pitch accents. One interesting finding was that speakers at both proficiency levels were fluent at manipulating boundary tones for pragmatic purposes while still making both error types, which suggests that prosody marking pragmatic meaning was acquired earlier than phonetic features not related to pragmatic meanings. Figure 5.10 shows the number of errors for each type in speakers' data at intermediate and advanced levels.

Figure 5.10 Number of Type 1 and Type 2 errors in intermediate (square) and advanced (triangle) speakers' data



The X-axis indicates the number of Type 1 errors and the Y-axis shows the number of Type 2 errors. Intermediate speakers (labeled as a square) produced more errors of both types than

advanced speakers (labeled as a triangle). Although the raw number of errors was higher in intermediate speakers' data, the number of errors for the two proficiency levels was only significantly different for Type 2 errors ( $p > .05$ ). Advanced speakers are not necessarily better at avoiding Type 1 errors than are intermediate speakers, while they are significantly better at avoiding Type 2 errors than intermediate speakers. In other words, Type 1 is not completely acquired by speakers at either level. Advanced speakers made Type 1 errors as frequently as intermediate speakers, suggesting that Type 1 is likely to be acquired later than Type 2.

However, one question may arise regarding the lower number of Type 1 errors at both proficiency levels. If Type 1 is acquired later and is more difficult to acquire, there should be a higher number of Type 1 errors than Type 2 errors. As briefly mentioned previously, this is not so because Type 1 errors in the current study only include instances which are already filtered out from Type 2 and therefore the instances of Type 1 errors do not have English stresses. Conversely, tokens of Type 2 errors potentially violate Type 1 as well because stressing the initial syllable indicates an inability to map between initial segment and tone. There is only one exception that violates Type 2 but not Type 1 (Example 5.10).

In summary, the results suggest that L2 learners acquire L2 phonetics and phonology with the following order: 1) boundary tones marking pragmatic meanings, 2) AP tonal patterns without producing English L1 stress (Type 2), and 3) AP-initial tone assignment (Type 1). Learners who knew how to manipulate boundary tones (1) were not always successful in (2) and (3). Learners who could produce AP tonal patterns without producing pitch accent on one of the AP tones did not necessarily produce correct AP-initial tones. As discussed in Jun and Oh's (2000) study, this suggests that learners acquire meaning-related prosodic features earlier. These findings are noteworthy because they are based on speakers' actual use of language in

spontaneous speech outside a laboratory experiment setting. Errors analyzed here were made while speakers were authentically involved in meaning negotiation in the course of an interview. Therefore, examples shown in this chapter can be said to reflect speakers' interlanguage accurately.

### **5.3 English L2**

For English L2 prosody, types and locations of pitch accents assigned on words written in the syllabus format<sup>25</sup> were analyzed.<sup>26</sup> Pitch accent assignments on words not shown in the syllabus were excluded from the analysis. Table 5.8 shows the number of pitch accent assignments (\*), the total number of target words examined, averaged across three or six speakers in three groups (i.e., three native speakers, six L2 speakers who passed the test, and another six L2 speakers who failed the test), and the percentage of pitch accent assignments out of the total number of target words. The target words were categorized into nouns, content verbs and function verbs in the table.

---

<sup>25</sup> The syllabus format can be found in Chapter 2.

<sup>26</sup> Although English pitch accent assignments involve duration and intensity as well as pitch (fundamental frequency, F0), this study mainly focuses on pitch and compares the production of pitch by native and L2 speakers.

Table 5.8 Pitch accent assignment in keywords in three groups

N=native (3), P=passed (6), F=failed (6)

	Noun			Content Verb			Function Verb		
	*	Total	%	*	Total	%	*	Total	%
N	28.7	44.3	64.7	2	7	28.6	0.7	10.3	6.5
P	24.8	38.5	64.5	1.7	4.7	35.7	1.5	9.7	15.5
F	27.5	35.8	76.7	2.7	3.2	84.2	0.8	7.5	11.1

All three groups assigned pitch accents to more than 60% of the nouns. While N and P assigned pitch accents on about 65% of the nouns, F assigned pitch accents most frequently, on more than 76% of nouns. For content verbs, N assigned pitch accents the least while F assigned the most on over 80% of the verbs. P assigned pitch accents more than N but the percentage is not as high as F. For function verbs, all groups assigned pitch accents on less than 20%. N assigned the least and P assigned the most. The results show that L2 speakers produced pitch accents more frequently than native speakers on the target words, suggesting that L2 speakers are likely to focus on producing individual words with pitch accents rather than the overall flow of the talk. A detailed analysis is provided in Section 5.3.2.

### 5.3.1 Types of pitch accent assignments

In the syllabus presentation, the speakers introduce new information, some of which is in a contrastive relationship (e.g., midterm one in third week vs. midterm two in seventh week), as shown in the following information:

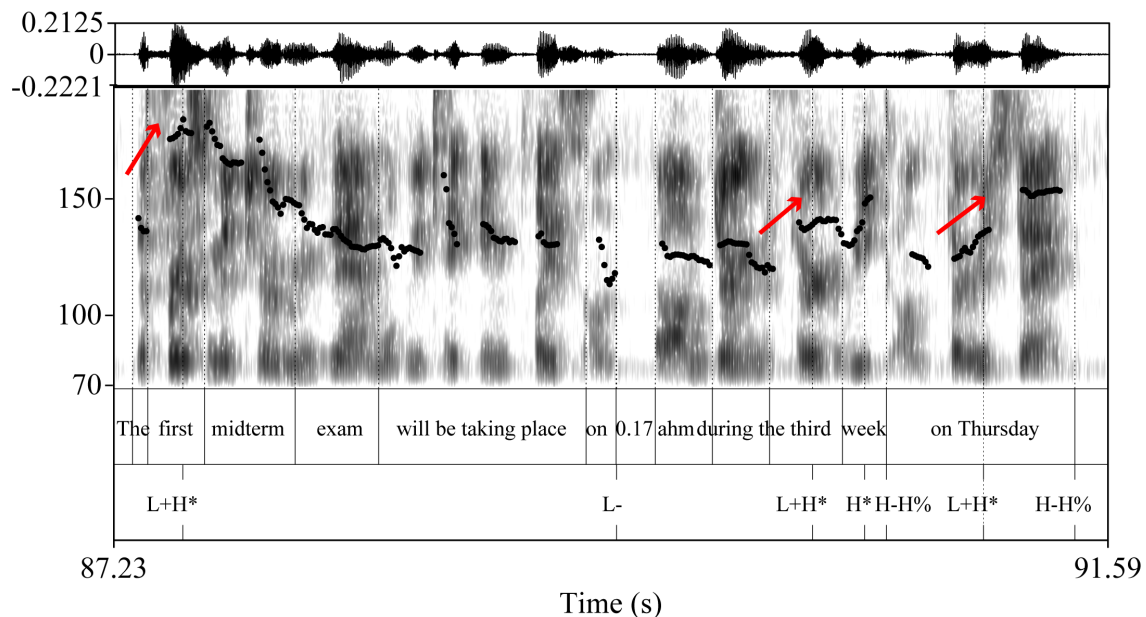
Tests:

1<sup>st</sup> midterm exam – Thursday, Third Week

2<sup>nd</sup> midterm exam – Thursday, Seventh Week

Two midterms, test times, and the day of the tests are contrasted (*midterm one* vs. *midterm two*, *third week* vs. *seventh week*, *Thursday*). The following figure illustrates native speaker 1's (NS1) presentation about the first midterm exam contrasted with the second midterm exam. The contrasted information *the first*, *the third*, and *Thursday* is marked with L+H\*, following Pierrehumbert and Hirschberg's (1990) description.

Figure 5.11 L+H\* on contrasted information

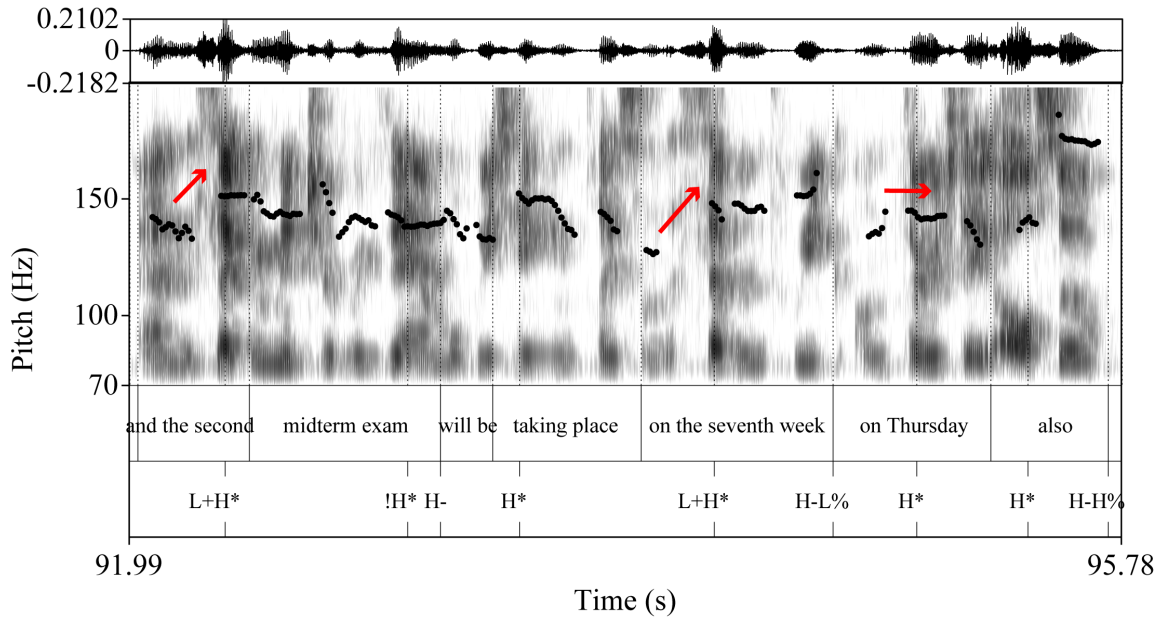


The figure below illustrates the production of information about the second midterm exam.

Unlike the production of the first midterm exam, NS1 uses H\* to mark the contrasted information. In NSs' data, I have found that not only L+H\* but also H\* were commonly used to mark contrasted information. *The second* and *the seventh* get L+H\* and *Thursday* gets H\*.

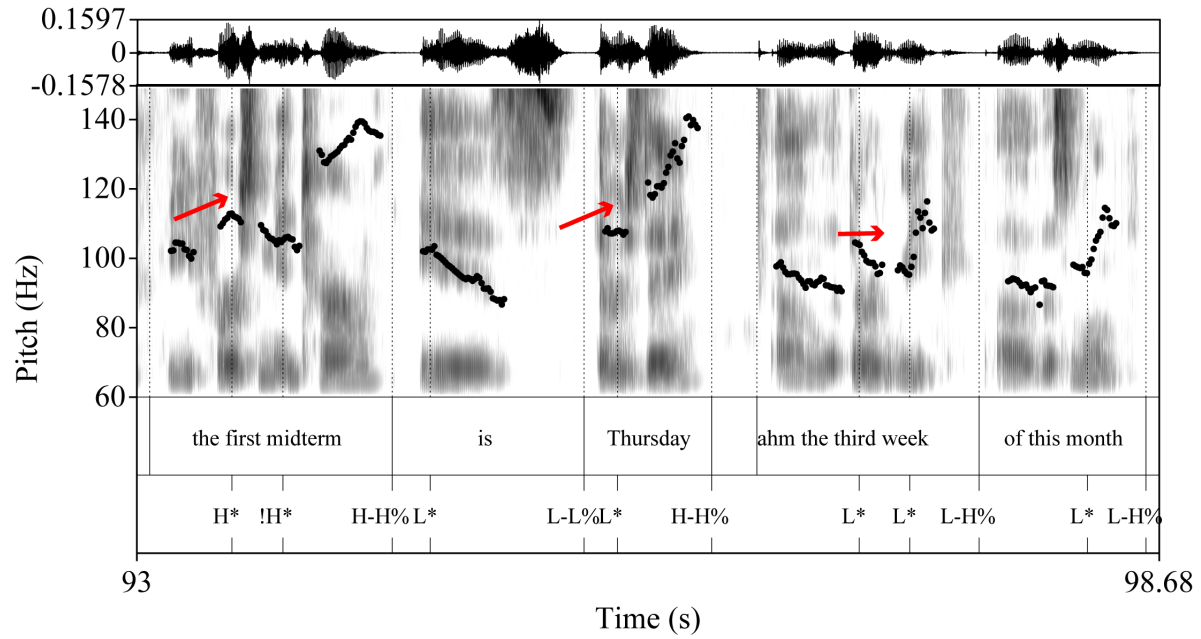


Figure 5.12 L+H\* and H\* on contrasted information



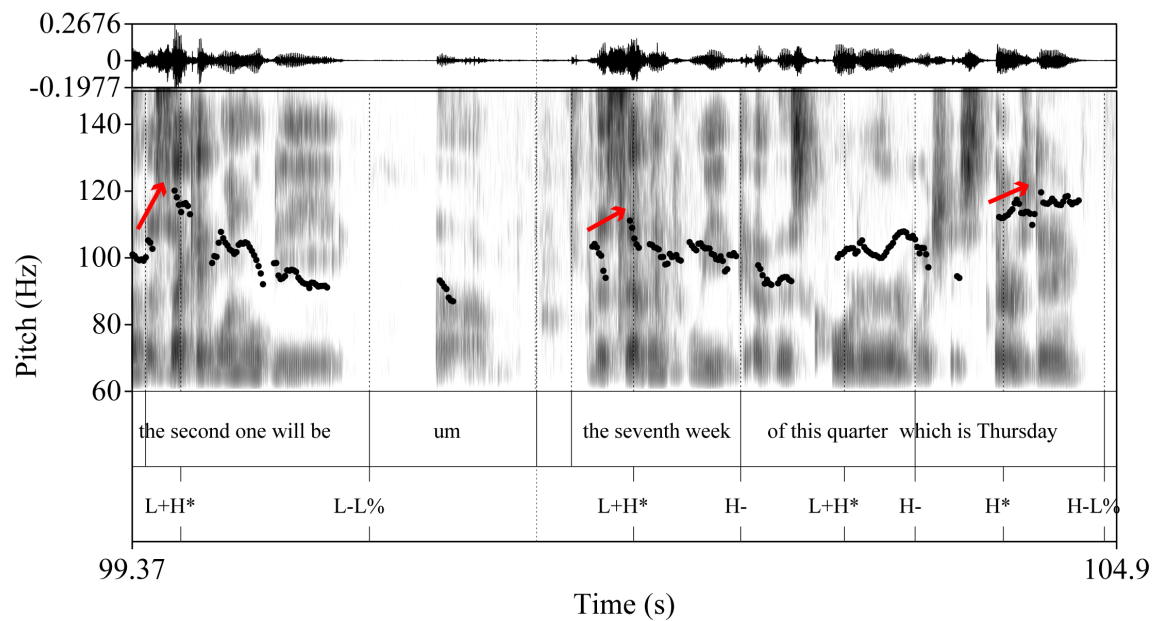
In some NS data, L\* is realized on the contrasted words, which appears incorrect because L\* is used when the speaker and the listener share certain forms of knowledge. The analysis of their previous talk revealed that L\* was used because the NS assumed that this shared knowledge was present. NS2 pretends to “review” the syllabus, which was previously covered in class with the professor, and begins the syllabus presentation by saying, “Uh, so, I’m just gonna quickly go through the course syllabus, which um usually you already received in your class=but uh in case you have any questions it’s an opportunity to ask.” Figure 5.13 shows how NS2 uses L\* to talk about the first midterm exam.

Figure 5.13 L\* on contrasted information



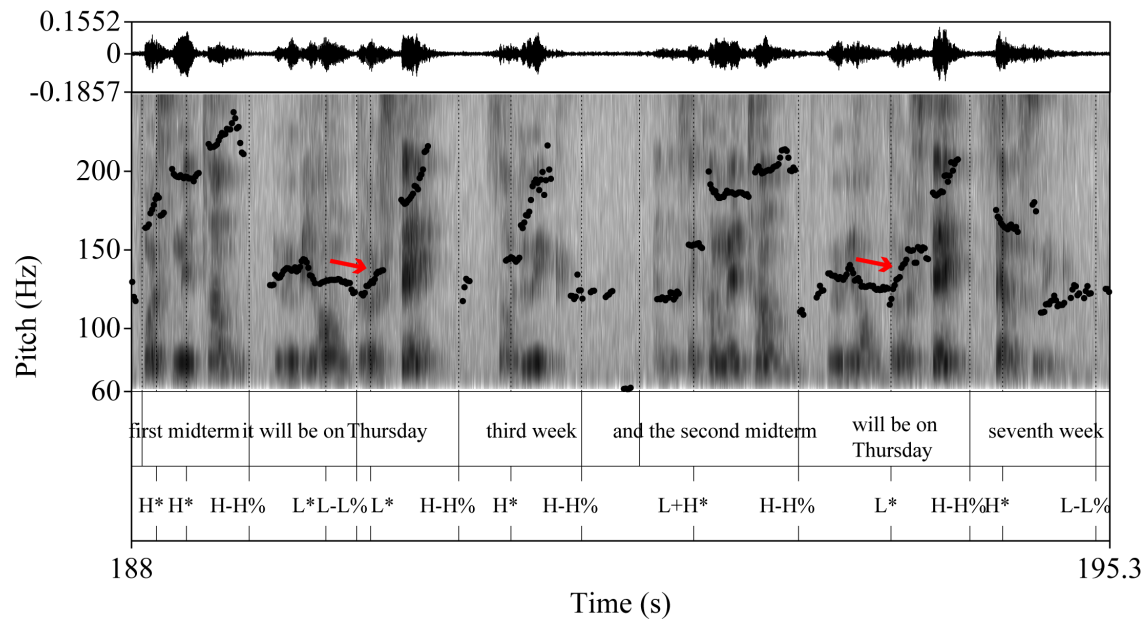
For the second midterm exam, NS2 uses L+H\* and H\* to contrast the information, as shown in Figure 5.14.

Figure 5.14 NS2's production



On the other hand, there were instances where L2 speakers used L\* on contrastive information without the assumption of shared knowledge between the speaker and the listener.<sup>27</sup> Figure 5.15 shows the production by P5 who produces L\* on both *Thursdays*. The contrastive information (i.e., *first* vs. *second* and *third* vs. *seventh*), however, is correctly assigned H\* and L+H\*.

Figure 5.15 L\* on *Thursday* produced by P5



Similar production by F3 is shown in Figures 5.16 and 5.17. The speaker produces L\* on *Thursday* and H\* on *third* and *seventh*.<sup>28</sup>

<sup>27</sup> There were four cases of L\* in the P group and eight instances of L\* in the F group.

<sup>28</sup> The long pause indicated with number in the parenthesis (e.g., (2.1)) is because the speaker is speaking while writing the information on the blackboard.

Figure 5.16 L\* on *Thursday* produced by F3

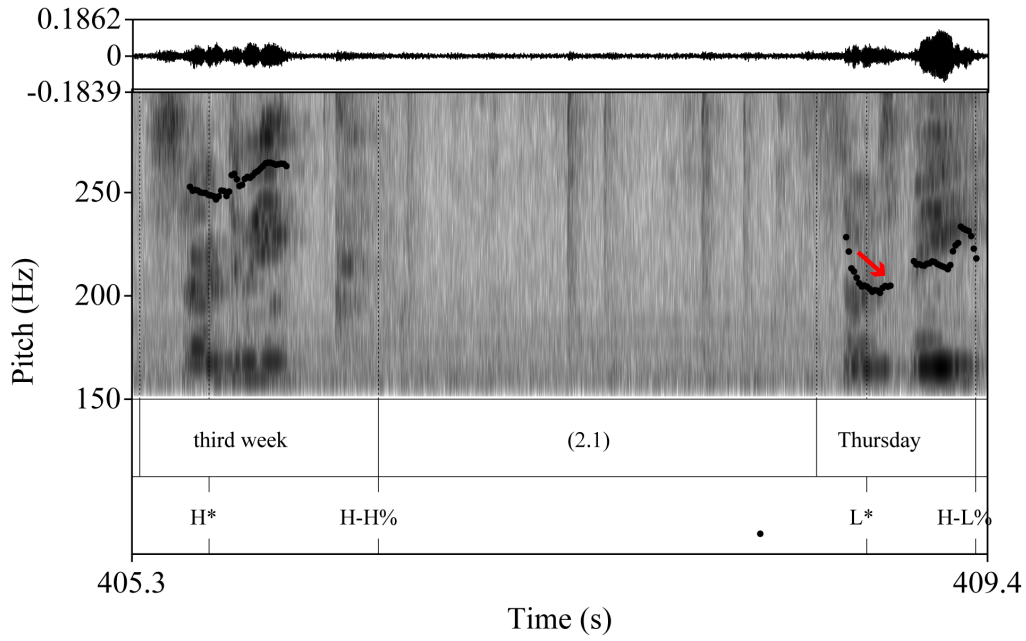
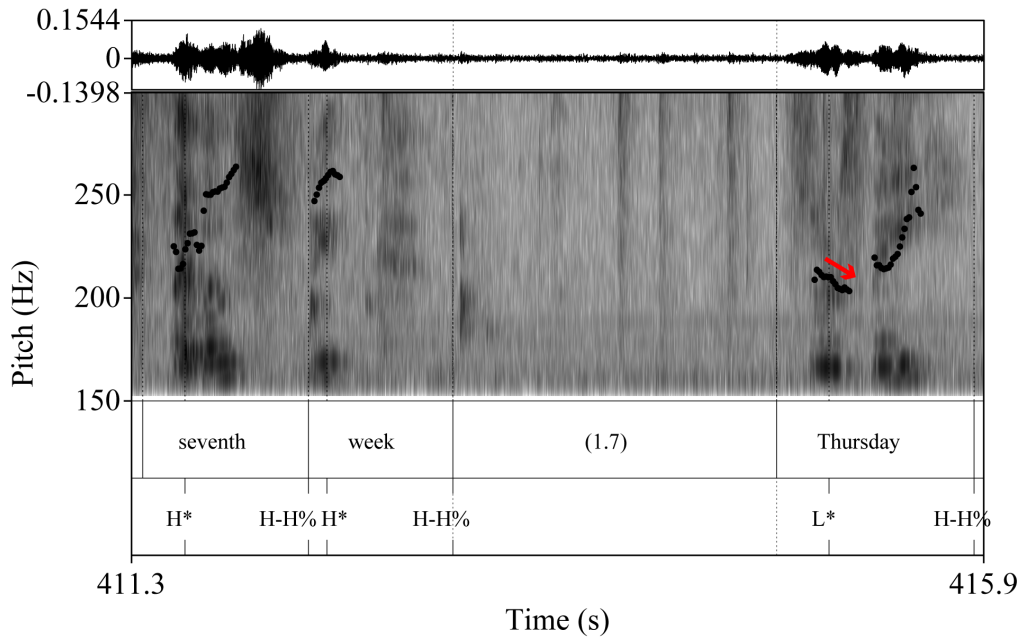


Figure 5.17 L\* on *Thursday* produced by F3



### 5.3.2 Location of pitch accent assignments

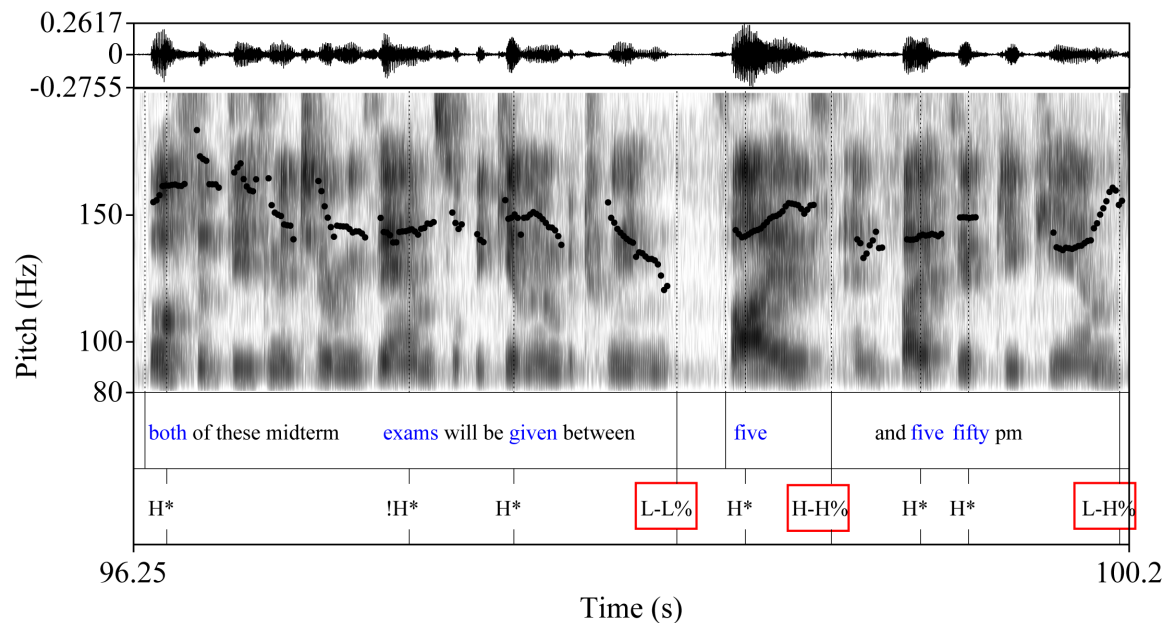
#### 5.3.2.1 Frequent assignment of pitch accents

Table 5.8 showed that English L2 speakers tended to produce pitch accents more frequently than native speakers on both content words and function words, and suggested that L2 speakers are focusing more on the accuracy of the production of each word rather than on the overall flow of the speech. Figures 5.18-5.20 illustrate the way speakers in different groups assign pitch accents on the same portion of information. They are speaking about the midterm test time:

*Both midterm exams are scheduled 5-5:50 PM*

Notice that how many boundary tones (%) speakers produced and where the boundary tones were realized. In Figure 5.18, NS1 assigns pitch accents on the words marked in blue in three IPs.

Figure 5.18 NS1's production



In F4's production, the speaker assigns pitch accents more frequently, and all the words receive pitch accents except for the function verb *are*. In the phrase in *five to five fifty*, each of the words is assigned pitch accents in four individual IPs.

Figure 5.19 Production by F4

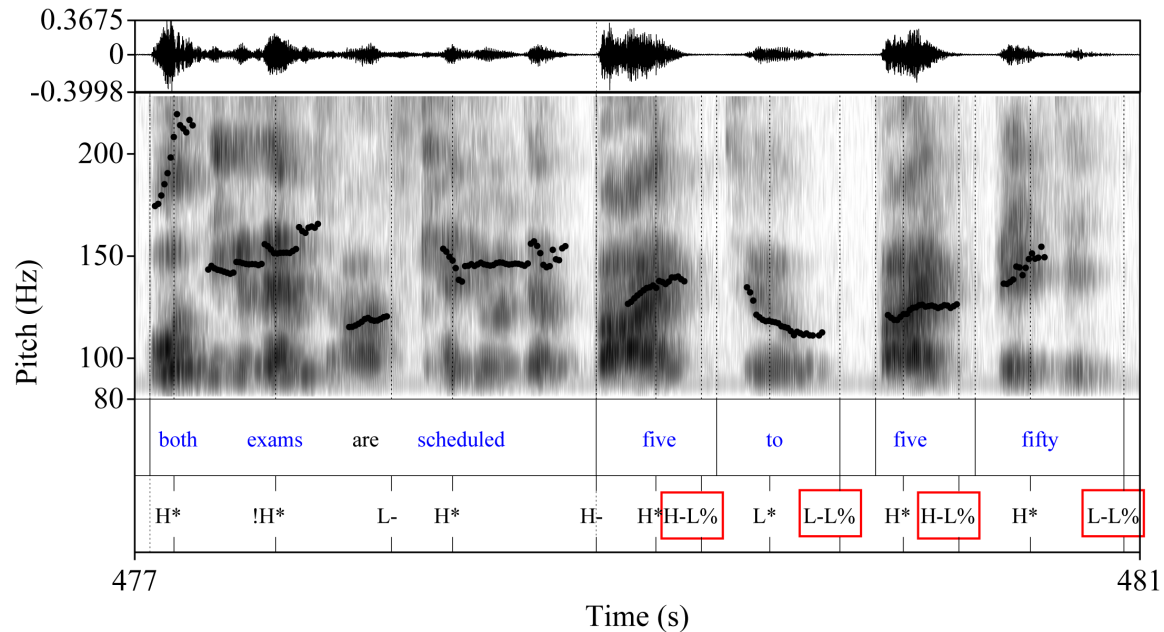
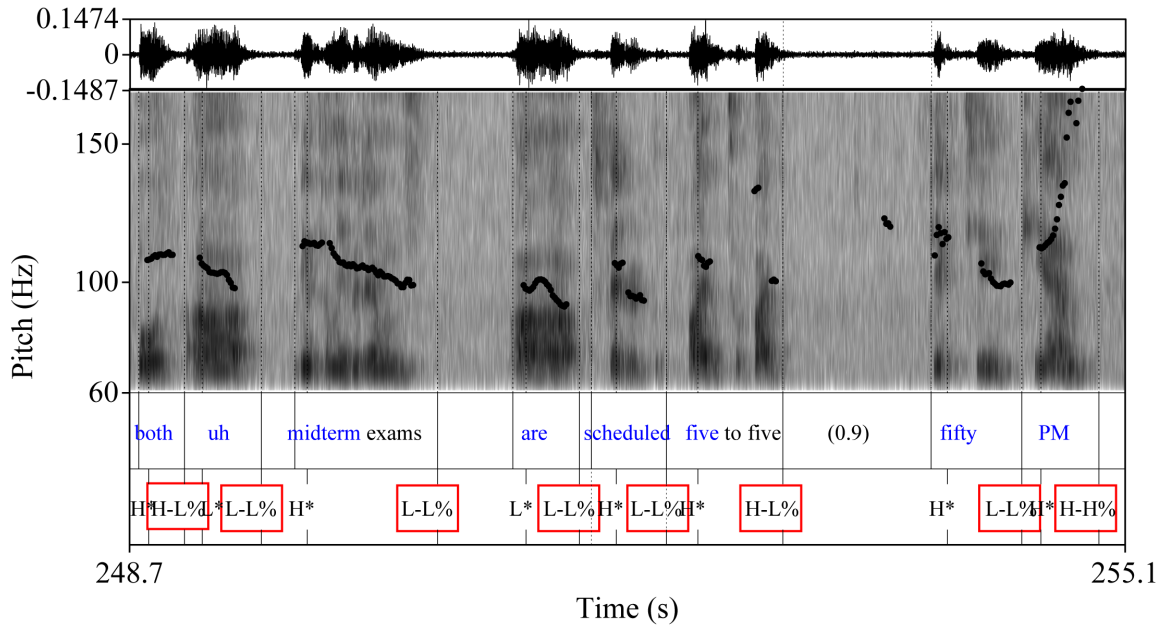


Figure 5.20 shows another example from P6 illustrating the frequent assignment of pitch accents. The filler word *uh* and the function verb *are* are assigned pitch accents as well. Moreover, because the presentation is disconnected by the pause or filler words, one piece of information is produced across eight IPs while the same information is produced in three IPs in NS1's presentation.

Figure 5.20 Production by P6



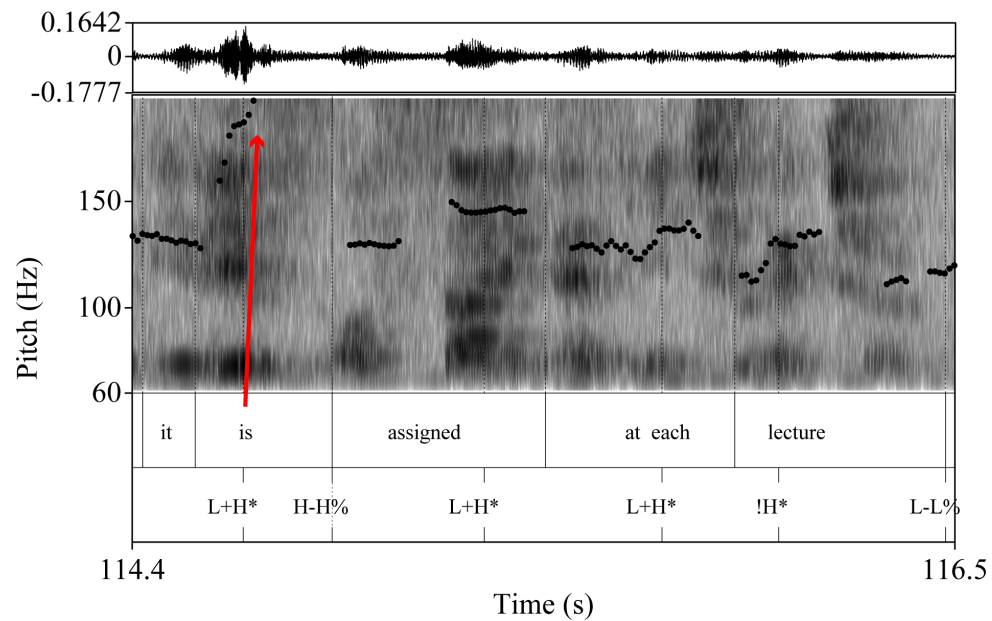
### 5.3.2.2 Pitch accent assignments on function verbs

As indicated in Table 5.8, English L2 speakers assigned pitch accents on function words more frequently than native speakers. While there are some instances in which H\* needs to be assigned to function verbs (e.g., emphatic stress), the following examples are not the case. In Figures 5.21 and 5.22, P5 talks about the days homework assignments are assigned:

*Homework:  
assigned at each lecture (Monday, Wednesday, Friday)*

The speaker assigns H\* on the function verbs *is* and *will*, which are marked with the arrow. The portion where H\* is assigned has high F0 and intensity.<sup>29</sup>

Figure 5.21 Production by P5



<sup>29</sup> The intensity of the function verb *is* (65dB) is higher than that of surrounding words, *it* (61dB) and *assigned* (59dB). The intensity of the function verb *will* (68dB) is higher than that of surrounding words, *we* (63dB) and *assign* (59dB).



Figure 5.22 Production by P5

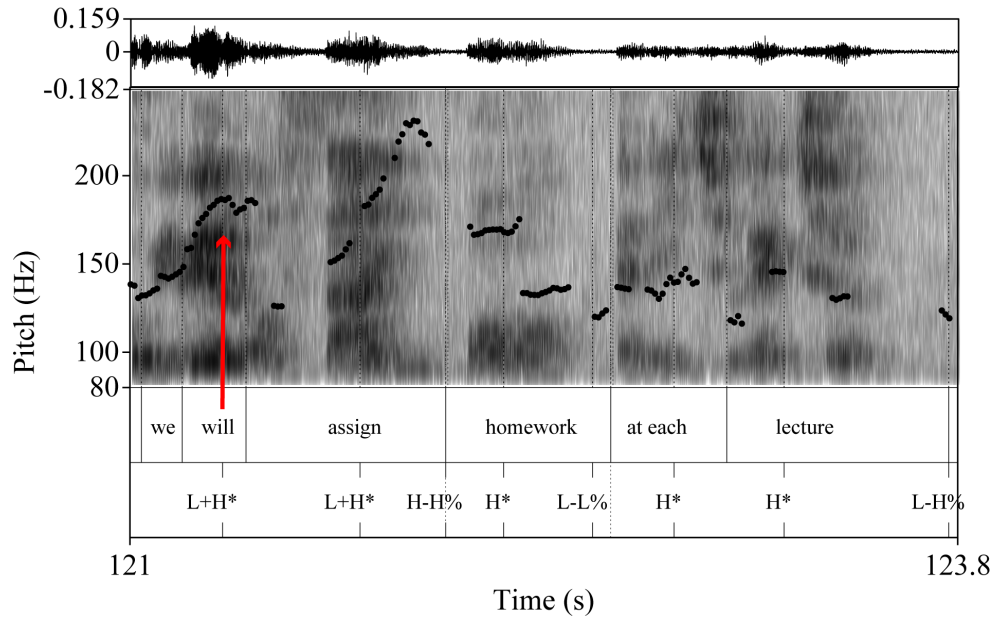


Figure 5.23 shows another portion of the presentation, talking about the final exam date and time.

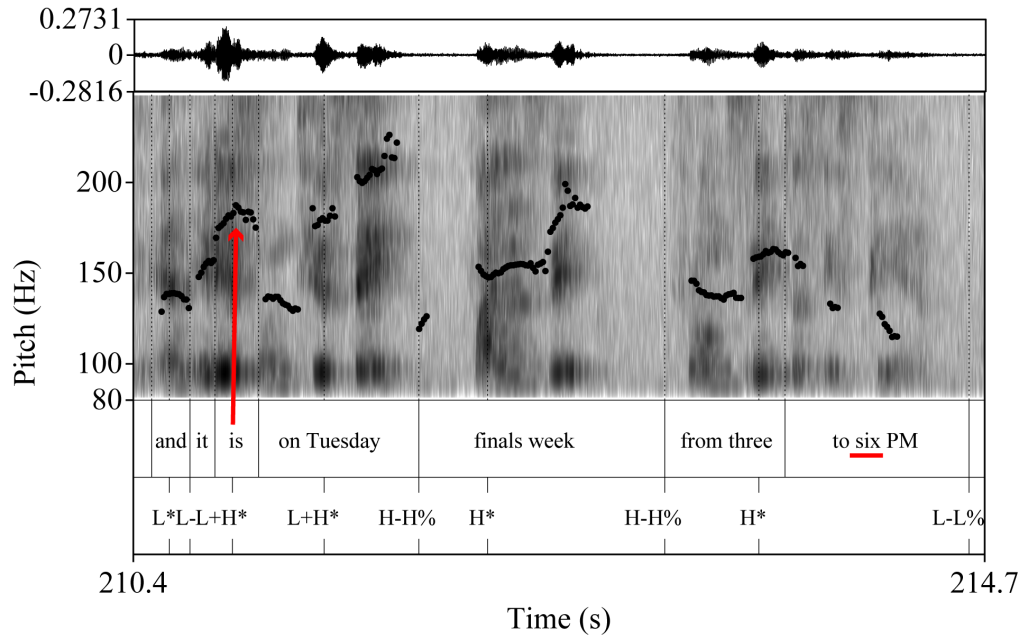
The speaker assigns H\* on *is*.<sup>30</sup> However, notice that the content word *six*, which needs to be accented, does not receive any pitch accent.

*Tests:*

*Final exam – Tuesday, Finals week, 3-6 PM*

<sup>30</sup> The intensity of the function verb *is* (71dB) is higher than that of surrounding words, *it* (65dB) and *on* (59dB).

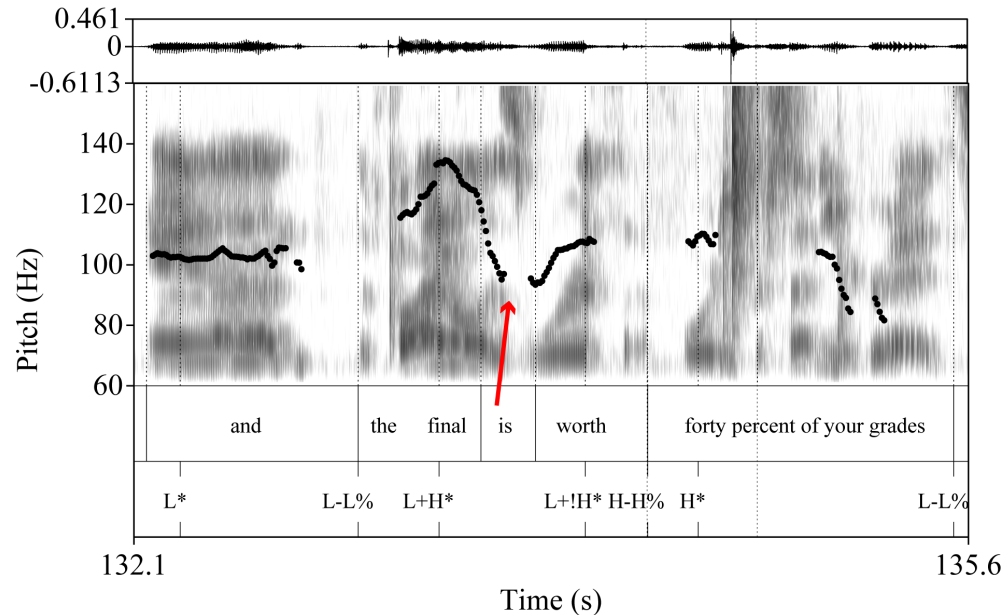
Figure 5.23 Production by P5



In native speakers' examples, no function verbs were assigned pitch accents. In Figure 5.24, the function verb *is* is assigned L as part of L+!H\*.<sup>31</sup> Only keyword information *final* and *forty* is highlighted with H\*.

<sup>31</sup> !H\* is a downstepped H\*, which indicates that the tone of the prominent syllable is lower than that of a preceding H in the IP.

Figure 5.24 NS3's production



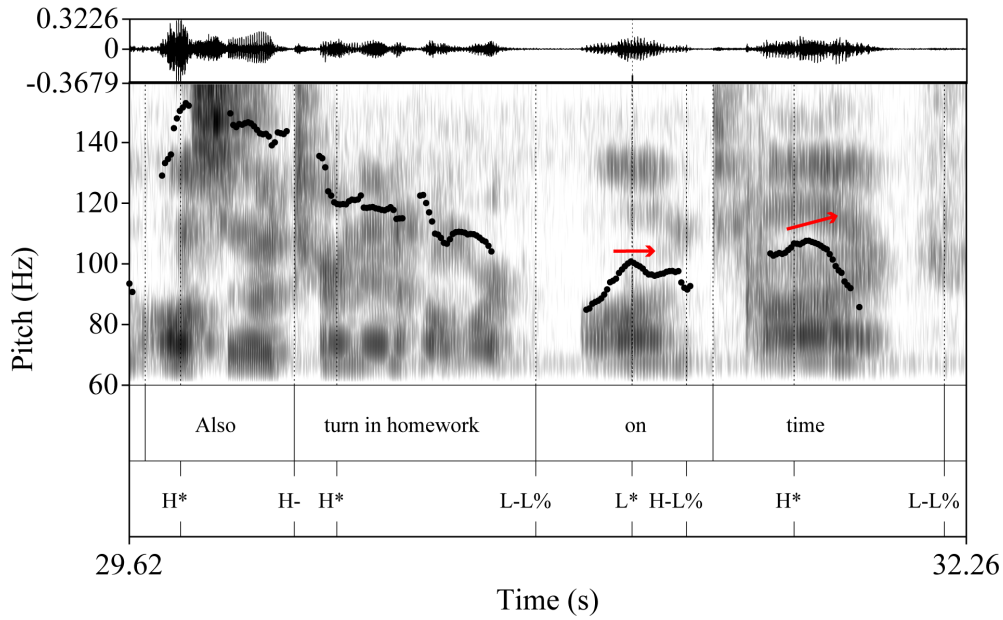
### 5.3.2.3 Pitch accent assignment on emphatic words

In the syllabus format, the homework assignment due date is highlighted with capital letters as below:

*TURN HOMEWORK IN ON TIME: late homework not accepted*

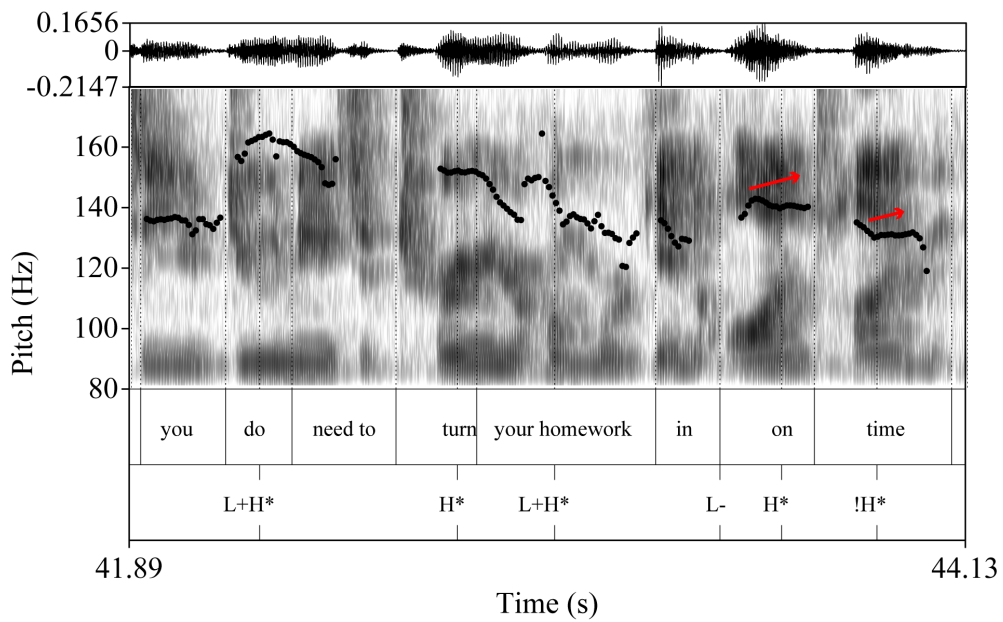
Speakers in different groups highlighted information by assigning pitch accents on different words. NSs emphasized the phrase *on time* by assigning pitch accents on both of the words. In Figure 5.25, NS3 produces two IPs and assigns L\* to *on* and H\* to *time*.

Figure 5.25 NS3's production of *ON TIME*



In Figure 5.26, NS1 assigns H\* and !H\* to *on* and *time*, respectively. The emphatic *do* is assigned H\* as well.

Figure 5.26 NS1's production of *ON TIME*



In contrast, none of the L2 speakers in P or F assigned pitch accents on the preposition *on*. They produced H\* only on *time* only or assigned other pitch accents involving L\* on *time*. In Figure 5.27, P5 assigns H\* on *time* while *on* is assigned with L of the bitonal L+H\*. Similarly, F5 produces H\* on *time* and L on *on* in Figure 5.28. In Figure 5.29, P6 assigns L\* on *time*.

Figure 5.27 Production of *ON TIME* by P5

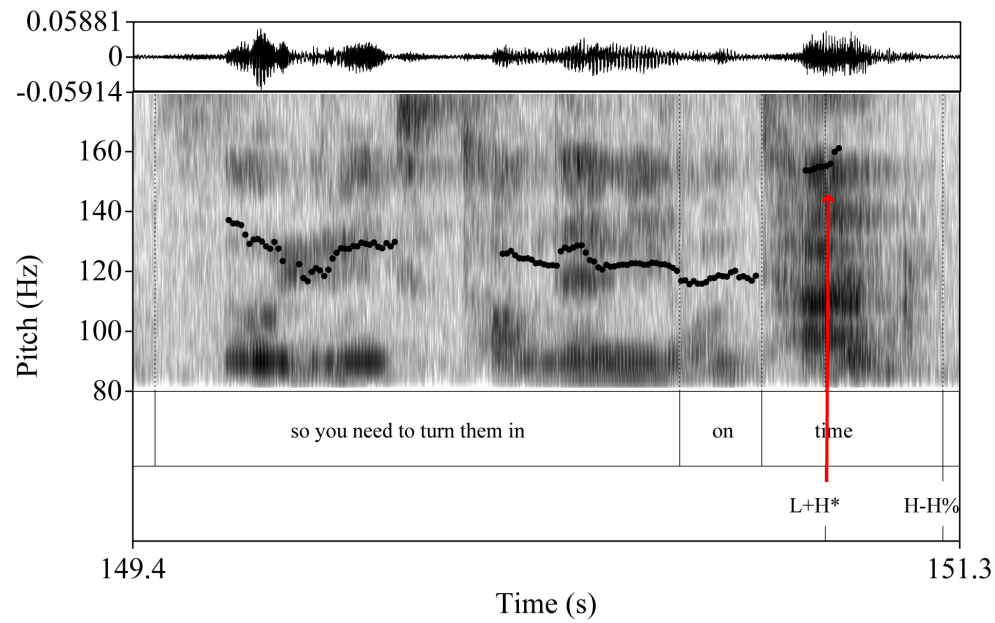


Figure 5.28 Production of *ON TIME* by F5

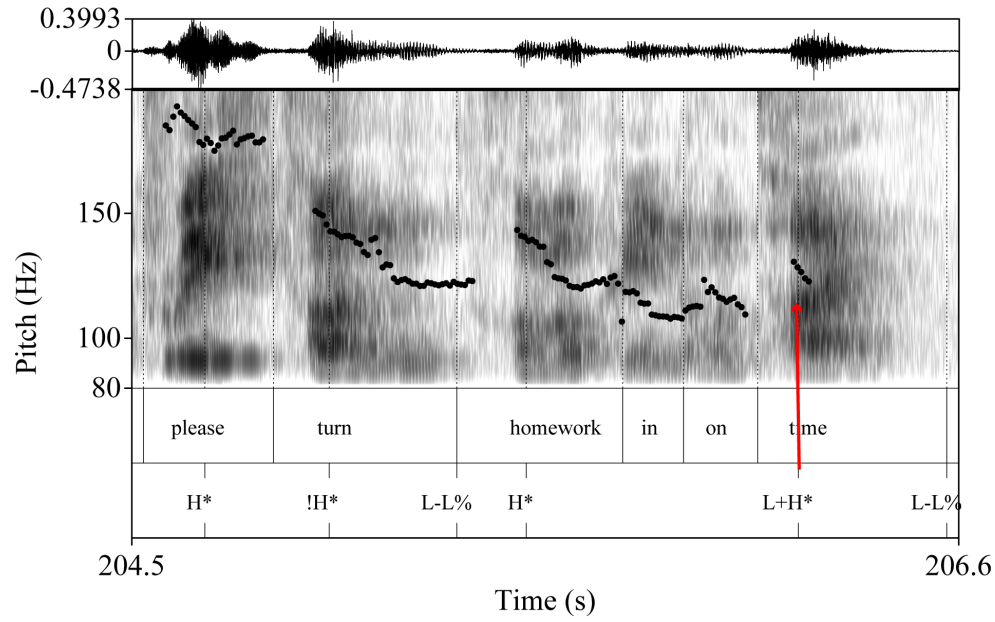
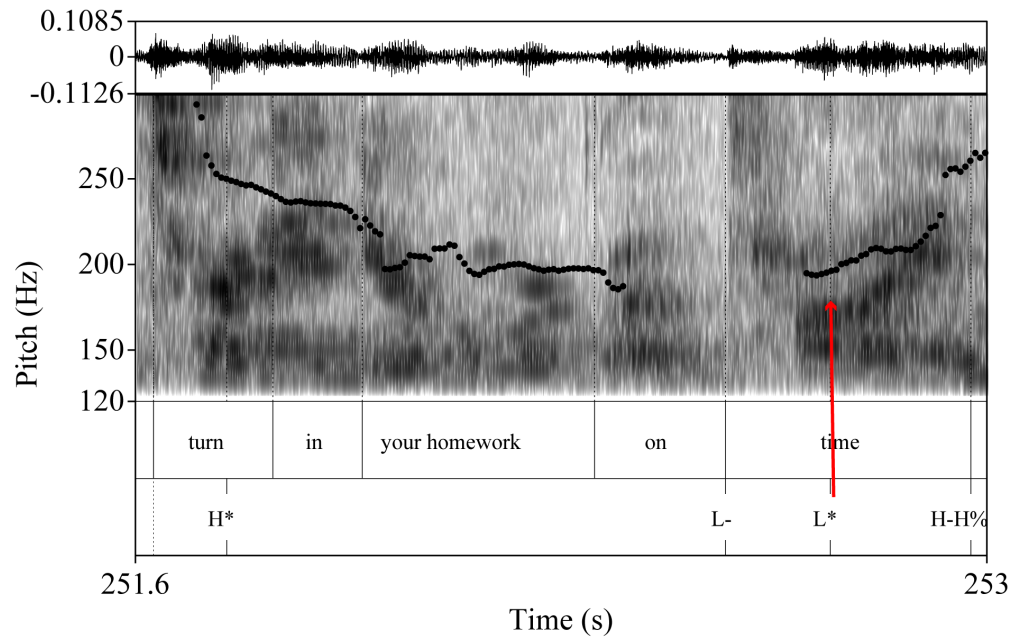


Figure 5.29 Production of *ON TIME* by P6



### 5.3.3 Conclusion and discussion of 5.3

Section 5.3 examined which types of pitch accent were assigned to contrastive words, and how frequently and on which words pitch accent were assigned in L2 speakers' syllabus presentation. In section 5.3.1, analysis showed that L2 speakers in both groups P and F often produced L\* on new or contrastive information when L+H\* or H\* were the correct pitch accents to be assigned. The results suggest that L2 speakers do not necessarily distinguish pitch accent types depending on whether the knowledge conveyed with the pitch accent is shared with the listener and the relationship between different types of information being provided (e.g., contrastive). Because L\* signals that the speaker assumes that the listener already knows the information conveyed, assigning L\* to information new to the listener can cause confusion and make the speaker fail at communicating this new information.

Section 5.3.2 showed that L2 speakers often overused pitch accents, particularly, H\*, even on non-emphatic function verbs such as *is* or *will*.<sup>32</sup> With the frequent pitch accent assignment, each word can be heard clearly with an accent, but the entire flow of the content may not be easy to grasp. This may interfere with communication and distract the listener's attention from the main focus of the presentation because it is difficult to determine on what information to concentrate. Then, a question arises here: Why do L2 speakers assign H\* on function verbs? One possible answer is that L2 speakers do not distinguish between different classes of words, such as function word and content word, or between different information types conveyed through the words by H\*. Wennerstrom's (2000) study has similar findings that

---

<sup>32</sup> Lee (2008) also found that non-emphatic function words were assigned with pitch accents at a rate of 40.5% (144 sentences out of 324) in Korean speakers' reading.

English L2 speakers<sup>33</sup> who rated low in fluency tended to assign H\* on every word, including function words. However, it is striking that even L2 speakers who passed the oral proficiency test had difficulties in producing H\* accurately in this dissertation analysis. H\* assignment seems to be affected by L1 of the L2 speakers, which, in this case, is Korean. Notice that L2 speakers assigned H\* on the second syllable position of the IP. In Figure 5.21, the first word and the first syllable of the phrase *it* gets L of the bitonal L+H\*, and the second word/syllable *is* gets H\* of L+H\*. Similarly, in Figure 5.22, *we* gets L of the L+H\* and *will* gets H\*. Korean APs have L(H)-H-L-H tonal patterns and the second syllable of the AP gets a high tone. Thus, it is likely that the L2 speakers tended to apply those rules to English and realized a high tone on the second syllable with the use of English H\*. H\* in L2 speakers' discourse is associated with H in Korean AP tonal patterns, as seen in how the speakers frequently assigned H\* to the second syllable of the IP in the presentations, rather than associated with the English H\* which signals different information status. Section 5.3.2 also showed that L2 speakers, on the other hand, assigned H\* infrequently on the emphatic phrase *on time*. None of the speakers assigned H\* on the preposition *on*; only *time* was accented with L\* or H\*. This indicates that the L2 speakers do not know how to emphasize words using H\* and where to assign H\*. While native English speakers convey different meanings (new/old, contrastive, emphatic) by using different types of pitch accents, analysis showed that L2 speakers in both P and F were not yet proficient at mapping between meaning and pitch accents.

---

<sup>33</sup> L1s of the study participants were Korean, Italian, Mandarin, Thai, and Japanese.



## CHAPTER 6

### CONCLUSION

#### 6.1 Summary

The purpose of this dissertation was to examine whether and how second language (L2) speakers use prosody for interactional purposes at the discourse level and to identify prosodic features that make L2 speakers' speaking non-native-like, using authentic English L2 and Korean L2 interactional data in oral proficiency test settings. The dissertation aimed to propose a relationship between the acquisition of prosody for interactional/pragmatic meanings and that of phonetics/phonology in terms of acquisition order.

Chapter 3 demonstrated the close relationship between boundary tones and grammatical suffixes *(nu)ntey* and *ketun* and their discourse meanings. *(Nu)ntey* was used as a backgrounder realized with H% or HL% and as a mitigator with rising tones, LH% and H%. *Ketun* was often used with H% to supplement parenthetical information or provide a thesis statement. Prosodically, H% and HL% with *(nu)ntey* and *ketun* signal turn continuation while inviting the interlocutor's attention. On the other hand, H% and LH% with *(nu)ntey* elicited the interlocutor's uptake in a form of a verbal response or attention and also mitigated the speaker's dispreferred tone. Speakers at both intermediate and advanced levels were able to use *(nu)ntey* as a backgrounder with appropriate boundary tones, but they used the mitigator *(nu)ntey* for different purposes according to proficiency level. Advanced speakers could use it to mitigate the dispreferred tone of the conveyed message relevant to the conversational situation (e.g., role-play), but intermediate speakers revealed a lack of linguistic proficiency using *(nu)ntey* and positioned themselves as language learners and the interviewer as a language expert. As for

*ketun*, while both intermediate and advanced speakers used *ketun* and H% to provide supplementary information, only advanced speakers were able to introduce a thesis statement using *ketun* and matching H% boundary tones.

Chapter 4 examined parentheticals (strings of talk inserted into main utterances) in terms of their sequential positions and phonetic features in Korean L2 and English L2 discourse data. The analysis showed that L2 speakers were able to organize their talk cohesively using the parenthetical structure and its prosodic integration into the host utterances. Sequentially, L2 speakers used parentheticals to elaborate on the host utterances by providing additional relevant information based on constantly monitoring what had been said or the prediction of what was going to be said. By so doing, they prevented understanding difficulties that might be raised by the interlocutor due to lack of information and further pre-empts repair that might be initiated by the interlocutor. Prosodically, L2 speakers merged two separate syntactic units across the host and the parenthetical, and used the mismatch of prosody and syntax boundaries to continue the turn while preventing the interlocutor from joining in the talk. This chapter introduced two classroom activities used for the turn-taking practices, which included a role-play and dubbing.

Chapter 5 investigated a different issue in L2 production by describing error types that violate the L1 intonation framework. The types of errors made by L2 speakers were analyzed based on the ToBI intonation framework. In Korean L2, AP (Accentual Phrase)-initial tone assignments and AP tonal pattern production by L2 speakers were examined. An AP-initial tone gets H on aspirated or tense segments and L on other sounds. Native English Korean L2 speakers did not map between tone and segment types regardless of proficiency levels. Moreover, they transferred L1 pitch accents to Korean APs, leading to a mixture of English pitch accents and Korean prosody. Analysis showed that the first error type (Type 1) was made by advanced

speakers as frequently as by intermediate speakers while the second error type (Type 2) was made more frequently by intermediate speakers. This suggested the later acquisition of Type 1 than Type 2. In English L2, the types and location of pitch accent assignments were examined. L2 speakers often assigned L\* on new or contrastive information instead of L+H\* or H\*. In addition, L2 speakers overused pitch accents, especially H\*, on non-emphatic function words but they used pitch accents less frequently on emphatic words where pitch accents were needed. These findings suggested a lack of a mapping between pitch accent types and conveyed meanings in L2 speakers' English proficiency.

## **6.2 Implications of the study**

The findings of this dissertation revealed crosslinguistic similarities between Korean L2 and English L2 in that L2 speakers are more proficient at meaning negotiation at the level of IPs or ips but are less proficient at producing smaller prosodic units or prosodic properties related to lexical prosody (i.e., APs in Korean and pitch accents in English). Korean L2 speakers were found to be proficient at the following, in decreasing order: 1) boundary tones marking pragmatic meanings, 2) AP tonal patterns without producing English L1 stress (Type 2), and 3) AP-initial tone assignment (Type 1). In English L2, speakers were proficient at the following, in decreasing order: 1) prosodic features for turn-taking practices, 2) pitch accents. The findings from the Korean L2 data also suggest that speakers acquire prosody associated with pragmatic meanings earlier than prosody associated with nonpragmatic meanings.

Second, this dissertation's findings suggest the value of teaching L2 prosody and its use in conversation in language classrooms. Although some prosodic features were acquired without classroom instruction (e.g., boundary tones), other prosodic features were not easy to produce even for advanced L2 speakers (AP-initial tone). However, classroom instruction could improve

L2 speakers' non-native-like production of prosody, which would require designing effective teaching approaches and developing appropriate practice materials. More research is needed to develop methods and materials for teaching prosody.

Lastly, this dissertation analyzed intonation data adopting the AM framework of intonational phonology and labeled the tonal and juncture category following the ToBI transcription system. By using the intonation models of English and Korean in the same framework, we could compare the L2 prosody for each language to its L1 prosody and to the L1 prosody of the L2 speakers' native languages. We found that IP boundary tones were a useful tool to understand discourse meanings in Korean, and prosodic phrases including IPs, ips, and APs were an effective measure in defining prosodic integration and separation both in Korean and English. Break indices were additionally labeled when IPs were not sufficient to mark boundaries due to the labeler's uncertainty between two prosodic boundaries. Thus, this dissertation suggests that the ToBI transcription system can be a useful tool to analyze prosody in various languages; the model is available in dozens of languages including English, German, Japanese, Korean, Greek, Catalan, and Portuguese, at the discourse level as well as at the phrasal level.

The findings of this study suggest several topics for future research in this area. First, the discourse type this dissertation examined was oral proficiency testing data in the form of an interview or presentation. Future research could examine L2 prosody in other discourse types including natural conversation. In natural conversation, various conversational situations will occur, leading to diverse uses of grammatical suffixes and prosodic cues; turn-taking practices may be more dynamic in natural conversation. Second, this study has examined pragmatic meanings created through the use of particular grammatical suffixes and boundary tones in

Korean L2 data only. Further investigation into the relationships between pragmatics, grammar and prosody in English L2 would be an interesting addition to the field of second language education. Thirdly, this study focused on analyzing selected prosodic features and error types that are most saliently and frequently made by L2 speakers. Further analysis of prosodic features and error types as well as languages whose prosodic system is different from English and Korean would contribute to the understanding of acquisition of second language prosody and the acquisition order of prosodic properties in second language.

**APPENDIX A**  
**LANGUAGE BACKGROUND INFORMATION SHEET**

Name:

Age (circle): 10~20 / 20~30 / 30~40 / 40~50 / above

E-mail (frequently used):

Occupation/Major:

Native Language:

Other Language(s) spoken & understood well:

1. Where were you born?

a) Country:

b) Town / City (circle), State:

c) Rural / Urban (circle)

2. If not born in the US, at what age did you move to the US?

3. What is the main language used at home?

4. Amount of time you use other language(s) daily:

English ( )%, other language(s) \_\_\_\_\_ ( )%, \_\_\_\_\_ ( )%

5. In what situations do you use other language(s)?

**If you have learned Korean or been to Korea, please answer the following questions.**

6. Have you ever been to Korea? Yes / No (circle)

(If 'Yes', please indicate in what year and for how long.)

---

---

7. Have you ever learned Korean in the past? Yes / No (circle)

(If Yes, please specify the following)

a) Where? (circle all that apply)

Home                      Sunday school (e.g., church)                      Preschool                      Kindergarten  
Elementary school                      Middle school                      High school                      Other: \_\_\_\_\_

b) For how long? \_\_\_\_\_ (months/years)

c) What level? (circle)

1) Beginning 2) Intermediate (low, mid, high) 3) Advanced (low, mid, high)

8. In what situations do you use Korean?

9. Amount of time you use Korean daily: ( )%

Thank you! ☺

## APPENDIX B

### ABBREVIATIONS USED IN THE KOREAN GLOSS

AC	accusative particle
AD	adverbializer
CIRCUM	circumstantial
CNJ	conjunctive suffix
CNT	counter
COMM	committal
CONN	connective
DC	declarative sentence-type suffix
DEF	deferential speech level
DN	defective noun
IM	imperative sentence-type suffix
INF	infinitive suffix
INT	intimate speech level or suffix
LOC	locative particle
NML	nominalizer suffix
POL	polite speech level, suffix or particle
PS	passive suffix
PST	past tense and perfect aspect suffix
Q	question marker
QT	quotative particle
RL	relativezer suffix
RT	retrospective mood suffix
SBJ	subject particle
TP	topic particle
TRANS	transferentive <i>-ta(ka)</i>



## REFERENCES

- American Council on the Teaching of Foreign Languages (ACTFL). (2012). ACTFL OPI familiarization manual. New York.
- Baker, A. A. (2011). Discourse prosody and teachers' stated beliefs and practices. *TESOL Journal*, 2(3), 263-292.
- Barth-Weingarten, D., Reber, E., & Selting, M. (Eds.). (2010). *Prosody in interaction* (Vol. 23). Philadelphia: John Benjamins Publishing Company.
- Beckman, M., & Pierrehumbert, J. (1986). Intonational structure in Japanese and English. *Phonology Yearbook*, 3, 255-309.
- Boersma, P., & Weenink, D. (2013). Praat: doing phonetics by computer [Computer program]. Version 5.3.56, retrieved 15 September 2013 from <http://www.praat.org/>
- Bolinger, D. (1989). *Intonation and its uses: Melody in Grammar and Discourse*. London: Edward Arnold.
- Brazil, D. (1980). *Discourse Intonation and Language Teaching*. Longman, Inc. 19 West 44th Street, New York, NY 10036.
- Brazil, D. (1997). *The communicative value of intonation in English*. Cambridge: Cambridge University Press.
- Bruce, G. (1977). *Swedish word accents in sentence perspective*. Lund: Gleerup.
- Celce-Murcia, M., Brinton, D., & Goodwin, J. (1996). *Teaching Pronunciation*. Cambridge: Cambridge University Press.
- Cho, T., Jun, S.-A., & Ladefoged, P. (2002). Acoustic and aerodynamic correlates of Korean stops and fricatives. *Journal of Phonetics*, 30(2) 193-228.
- Choi, J. (1991). Kwukeui cepsokmwun kwuseng yenkwu. [Studies on the structure of Korean connectives.] Seoul: Thapchwulpansa.
- Chun, D. M. (1988). The neglected role of intonation in communicative competence and proficiency. *The Modern Language Journal*, 72(3), 295-303.
- Couper-Kuhlen, E., & Selting, M. (Eds.). (1996). *Prosody in conversation: Interactional studies*. New York: Cambridge University Press.

- Cutler, A., & Pearson, M. (1986). On the analysis of prosodic turn-taking cues. *Intonation in discourse*, 139-156.
- Dehé, N. (2007). The relation between syntactic and prosodic parenthesis. In Dehé, N., & Kavalova, Y. (Eds.). *Parentheticals* (261-284). Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Dehé, N., & Kavalova, Y. (2007). *Parentheticals*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Döring, S. (2007). Quieter, faster, lower, and set off by pauses? Reflections on prosodic aspects of parenthetical constructions in modern German. In Dehé, N., & Kavalova, Y. (Eds.). *Parentheticals* (285-307). Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Flege, J. E. (1995). Second-language speech learning: Theory, findings, and problems. In W. Strange (Ed.). *Speech perception and linguistic experience: Issues in cross-language research* (233-277). Timonium, MD: York Press.
- Ford, C., & Thompson, S. (1996). Interactional units in conversation: Syntactic, intonational, and pragmatic resources for the management of turns. In E. Ochs, E. Schegloff, & S. Thompson, (Eds.). *Interaction and grammar* (134–184). Cambridge: Cambridge University Press.
- Goodwin, C. (1979). The interactive construction of a sentence in natural conversation. In G. Psathas (Ed.). *Everyday language: Studies in ethnomethodology* (97-121). New York: Irvington.
- Grosjean, F. (1989). Neurolinguists, beware! The bilingual is not two monolinguals in one person. *Brain and Language*, 36, 3-15.
- Günthner, S. (1996). The prosodic contextualization of moral work: an analysis of reproaches in ‘why’-formats. In Couper-Kuhlen, E., & Selting, M. (Eds.). *Prosody in conversation: Interactional studies* (271-302). New York: Cambridge University Press.
- Heritage, J. (1984). A change-of-state token and aspects of its sequential placement. In Atkinson & Heritage (Eds.). *Structures of Social Action* (299-345). Cambridge: Cambridge University Press.
- Iwasaki, S., & Tao H. (1993). A comparative study of the structure of the intonation unit in English, Japanese, and Mandarin Chinese, Annual Meeting of the Linguistics Society of America, Los Angeles, CA, Jan. 9. 1993.
- Jenkins, J. (2000). *The Phonology of English as an International Language: New Models, New Norms, New Goals*. Oxford: Oxford University Press.

- Jenkins, J. (2004). Research in teaching pronunciation and intonation. *Annual review of applied linguistics*, 24, 109-125.
- Jun, S.-A. (1993). *The phonetics and phonology of Korean prosody*. Ph.D. Dissertation, Ohio State University. [Published in 1996 by Garland, New York]
- Jun, S.-A. (1998). The Accentual Phrase in the Korean prosodic hierarchy. *Phonology*, 15(2), 189-226.
- Jun, S.-A. (2000). K-ToBI (Korean ToBI) labelling conventions (version 3.1, October 2000). *UCLA working papers in phonetics*, 149-173.
- Jun, S.-A. (2005). Phonological Development of Korean: a case study. 11th meeting of the Harvard International Symposium on Korean Linguistics (Harvard-ISOKL), 2005, Boston, MA.
- Jun, S.-A. (2005). *Prosodic Typology I: The phonology of intonation and phrasing*. Oxford University Press.
- Jun, S.-A. (2006). Intonational phonology of Seoul Korean revisited. In T. Vance, & K. Jones (Eds.). *Japanese/Korean linguistics*, 14, 15-26. Stanford: CSLI.
- Jun, S.-A. (2007). The Intermediate Phrase in Korean Intonation: Evidence from Sentence Processing. In Gussenhoven, C., & Riad, T. (Eds.). *Tones and Tunes: Studies in Word and Sentence Prosody* (143-167). Berlin: Mouton de Gruyter.
- Jun S.-A. (2011). Prosodic marking of Complex NP Focus, Syntax, and the Pre-/Post-focus String. In Washburn M. B., McKinney-Bock K., Varis E., Sawyer A., & Tomaszewicz B. (Eds.). *Proceedings of the 28th West Coast Conference on Formal Linguistics* (214–230). Somerville, MA: Cascadilla Press.
- Jun, S.-A. (2014). *Prosodic Typology II: The Phonology of Intonation and Phrasing*. Oxford University Press.
- Jun, S.-A., & Cha, J. (2015). High-toned [il] in Korean: Phonetics, Intonational Phonology, and Sound Change. *Journal of Phonetics*, 51, 93-108.
- Jun, S.-A., & Oh, M. (1996). A prosodic analysis of three types of wh-phrases in Korean. *Language and Speech*, 39(1), 37-61.
- Jun, S.-A., & Oh, M. (2000). Acquisition of second Language Intonation. *Proceedings of International Conference on Spoken Language Processing*, 4, 76-79. Beijing, China.
- Kim, K.-H., & Suh, K.-H. (1996). *Dealing with prior talk: discourse connectives in Korean conversation*. *Japanese/Korean Linguistics*, 5, 83–99. Stanford, CA: CSLI.

- Kim, K.-H., & Suh, K.-H. (2010). *The sentence-ending suffix-*ketun* in Korean conversation with reference to-*nuntey*: Sequence organization and management of epistemic rights*. *Tamhwawa inci*, 17(3), 1-38.
- Kim, M., & Stoel-Gammon, C. (2009). The acquisition of Korean word-initial stops. *The Journal of the Acoustical Society of America*, 125(6), 3950-3961.
- Kim, S. (2004). *The role of prosodic phrasing in Korean word segmentation*, Ph.D. dissertation, University of California, Los Angeles, CA.
- Kim, Y. (2009). The Korean discourse markers –*nuntey* and *kuntey* in Native-Nonnative Conversation: An Acquisitional Perspective. In Nguyen, H. t., & G. Kasper, G. (Eds.). *Talk-in-interaction: Multilingual perspectives* (317-350). Honolulu, HI: University of Hawaii, National Foreign Language Resource Center.
- Ladd, D. R. (1996). *Intonational phonology*. Cambridge: Cambridge University Press.
- Lee, H.-S. (1991). *Tense, aspect, and modality: A discourse-pragmatic analysis of verbal suffix in Korean from a typological perspective*. Ph.D. dissertation, University of California, Los Angeles, CA.
- Lee, H.-S. (1999). A discourse-pragmatic analysis of the Committal –*ci* in Korean: A synthetic approach to the form-meaning relation. *Journal of pragmatics*, 31(2), 243-275.
- Lee, J.-K. (2008). An intonational assessment of English communicative competence of Korean college students with the 7<sup>th</sup> curriculum. *Modern English Education*, 9(10), 256-282.
- Lee, K. (1993). *A Korean Grammar on semantic pragmatic principles*. Seoul, Korea: Hankuk munhwasa.
- Lee, S.-H., Park, M.-J., & Sohn, S.-O. (2011). Expanded Responses of English-speaking Korean Heritage Speakers During Oral Interviews. In Pallotti, Gabriele and Wagner, Johannes (Eds.). *L2 Learning as Social Practice: Conversation-analytic Perspectives* (87-104). Honolulu: National Foreign Language Resource Center.
- Levinson, S. C. (1983). *Pragmatics*. Cambridge, England: Cambridge University Press.
- Local, J. (1996). Conversational phonetics: some aspects of news receipts in everyday talk. In Couper-Kuhlen, E., & Selting, M. (Eds.). *Prosody in conversation: Interactional studies* (177-230). New York: Cambridge University Press.
- Mazeland, H. (2007). Parenthetical sequences. *Journal of Pragmatics*, 39(10), 1816-1869.
- Park, M.-J. (2003). *The meaning of Korean prosodic boundary tones*. Ph.D. dissertation, University of California, Los Angeles, CA.

- Park, M.-J. (2009). Perception and Production of Korean Obstruents through Prosody. *Journal of Korean Language Education*, 24, 143-163.
- Park, Y. Y. (1998). A discourse analysis of the Korean connective *ketun* in conversation. *Crossroads of Language, Interaction, and Culture*, 1, 71-89.
- Park, Y. Y. (1999). The Korean connective *nuntye* in conversational discourse. *Journal of Pragmatics*, 31(2), 191-218.
- Pickering, L. (2001). The role of tone choice in improving ITA communication in the classroom. *TESOL Quarterly*, 35, 233-255.
- Pickering, L. (2009). Intonation as a pragmatic resource in ELF interaction. *Intercultural Pragmatics*, 6(2), 235-255.
- Pierrehumbert, J. (1980). *The Phonology and Phonetics of English Intonation*. Ph.D. dissertation, Massachusetts Institute of Technology, Cambridge, MA.
- Pierrehumbert, J., & Beckman, M. (1988). *Japanese Tone Structure*. Cambridge: MIT Press.
- Pierrehumbert, J., & Hirschberg, J. (1990). The meaning of intonational contours in discourse. In Cohen, P., Morgan, J., & Pollack, M. (Eds.). *Intentions in communication* (271-311). MIT Press.
- Prieto, P., & Roseano, P. (Eds.). (2010). *Transcription of Intonation of the Spanish Language*. Munich: Lincom Europa.
- Sacks, H., Schegloff, E. A., & Jefferson, G. (1974). A simplest systematics for the organization of turn-taking for conversation. *Language*, 50, 696-735.
- Schegloff, E. A. (1982). Discourse as an interactional achievement: Some uses of “uh huh” and other things that come between sentences. In D. Tannen (Ed.). *Analyzing discourse: Text and talk* (71–93). Washington, DC: Georgetown University Press.
- Schegloff, E. A. (1996). Turn organization: One intersection of grammar and interaction. In Ochs, E., Schegloff, E. A., & Thompson, S. (Eds.). *Interaction and grammar* (52-133). Cambridge: Cambridge University Press.
- Schegloff, E. A. (1998). Reflections on studying prosody in talk-in-interaction. *Language and Speech*, 41 (3–4), 235–263.
- Schegloff, E. A. (2007). *Sequence Organization in Interaction. A Primer in Conversation Analysis*, Vol. 1. Cambridge: Cambridge University Press.
- Schegloff, E. A., Jefferson, G., & Sacks, H. (1977). The preference for self-correction in the organization of repair in conversation. *Language*, 53, 361-382.

- Selting, M. (2010). Prosody in interaction. In Barth-Weingarten, D., Reber, E., & Selting, M. (Eds.). *Prosody in interaction* (3-40). John Benjamins Publishing Company.
- Setter, J. (2008). Communicative patterns of intonation in L2 English teaching and learning: the impact of discourse approaches. *English Pronunciation Models: A Changing Scene*, 21, 367-392.
- Slater, T., Levis, J., & Levis Muller, G. (2015). Spoken parentheticals in instructional discourse in STEM and Non-STEM disciplines: The interaction of the prosodic, ideational, and interpersonal resources in signaling information structure. In G. Gorsuch (Ed.). *Talking matters: Research on talk and communication of international teaching assistants* (3-31). Stillwater, OK: New Forums Press.
- Sohn, H.-M. (1999). *The Korean Language*. Cambridge: Cambridge University Press.
- Sohn, S.-O. (2016). Development of the discourse marker kulentye ‘but, by the way’ in Korean: A diachronic and synchronic perspective. *Journal of Historical Pragmatics*, 17(2), 231-254.
- Sohn, S.-O., & Park, M.-J. (2002). Discourse, grammaticalization, and intonation: an analysis of *-ketun* in Korean. In N. Akatsuka & S. Strauss (Eds.). *Japanese/Korean Linguistics*, 10, 306-319.
- Ueyama, M., & Jun, S.-A. (1998). Focus realization in Japanese English and Korean English intonation. *Japanese and Korean Linguistics*, 7, 629-645, CSLI, Center Study Language & Information.
- Wells, B., & Peppé, S. (1996). Ending up in Ulster: phonetic aspects of turntaking in English dialects. In E. Couper-Kuhlen & M. Selting (Eds.). *Prosody in Conversation: Interactional Studies* (101-131). Cambridge: Cambridge University Press.
- Wennerstrom, A. (1994). Intonational meaning in English discourse: A study of non-native speakers. *Applied Linguistics*, 15(4), 399-420.
- Wennerstrom, A. (2000) The role of intonation in second language fluency. In H. Riggensbach (Ed.). *Perspectives on fluency* (102-127). Ann Arbor, MI: University of Michigan Press.
- Wennerstrom, A. (2001). *The music of everyday speech: Prosody and discourse analysis*. New York: Oxford University Press.
- Wennerstrom, A., & Siegel, A. F. (2003). Keeping the Floor in Multiparty Conversations: Intonation, Syntax, and Pause. *Discourse Processes*, 36(2), 77-107.
- Wong, J., & Waring H.Z. (2010). *Conversation analysis and second language pedagogy: A guide for ESL/EFL teachers*. New York: Routledge.