

Discourse-Level Intonation: A Challenge in EFL Instruction

Jindaporn Sangganjanavanish*

School of English, Institute of Social Technology, Suranaree University of Technology, Thailand

Abstract

Within the field of pronunciation research, a focus on the prosodic aspect of language rather than individual sounds has generated growing interest in intonation over the past few decades. It is widely recognized that intonation functions as one of the means of achieving effective communication in English and thus deserves attention in pronunciation instruction. The purpose of this paper is to discuss the significance of intonation teaching within the EFL context. First, the paper reviews literature in the area of discourse intonation, particularly the role of intonation in marking information structure and signaling topic structure in a discourse. Studies of the intonation patterns of nonnative speakers are then surveyed. Finally, it is contended that the teaching of discourse-level intonation remains a challenge in EFL situations despite an increasing awareness of its significance in communication and the difficulties nonnative speakers have in this regard.

Keywords: intonation (ทำนองเสียง); discourse (สัมพันธสาร); English as a Foreign Language (EFL) (ภาษาอังกฤษในฐานะภาษาต่างประเทศ)

บทคัดย่อ

ในการวิจัยด้านการออกเสียง การให้ความสำคัญกับลักษณะทางสัทสัมพันธ์ของภาษามากกว่าเสียงเดี่ยวได้ก่อให้เกิดความสนใจในเรื่องทำนองเสียงเพิ่มมากขึ้นในช่วงสองสามทศวรรษที่ผ่านมา เป็นที่ยอมรับกันอย่างกว้างขวางว่าในภาษาอังกฤษทำนองเสียงเป็นปัจจัยประการหนึ่งที่ช่วยให้บรรลุถึงการสื่อสารที่มีประสิทธิภาพ ดังนั้นทำนองเสียงจึงควรได้รับความสำคัญในการสอนการออกเสียง บทความนี้มีวัตถุประสงค์เพื่ออภิปรายถึงความสำคัญของการสอนทำนองเสียงในบริบทการเรียนการสอนภาษาอังกฤษในฐานะภาษาต่างประเทศ โดยส่วนแรกเป็นการทบทวนวรรณกรรมในด้านทำนองเสียงในระดับสัมพันธสารโดยเฉพาะอย่างยิ่ง บทบาทของทำนองเสียงในการบ่งชี้โครงสร้างสารสนเทศ

*Corresponding author. Tel.: +66-0-4422-4255; fax: +66-0-4422-4205

E-mail address: sanggan@sut.ac.th

และโครงสร้างหัวข้อในสัมพันธสารจากนั้นเป็นการสำรวจงานวิจัยในเรื่องรูปแบบทำนองเสียงของผู้พูดที่มีเจ้าของภาษา ในตอนท้าย บทความนี้ชี้ให้เห็นว่าการสอนทำนองเสียงในระดับสัมพันธสารยังคงเป็นความท้าทายอย่างหนึ่งในสถานการณ์การเรียนการสอนภาษาอังกฤษในฐานะภาษาต่างประเทศ แม้ว่าจะมีความตระหนักมากขึ้นในเรื่องความสำคัญของทำนองเสียงในการ สื่อสารและในปัญหาที่ผู้พูดที่มีเจ้าของภาษาพบในเรื่องดังกล่าว

Introduction

In spoken discourse, prosodic cues are exploited simultaneously along with syntactic and lexical choices to provide the listener with information essential for a coherent interpretation of a discourse (Cruttenden, 1997; Pickering 2004, Thompson, 1994; Tyler, 1992). Prosodic cues such as stress and intonation are crucial in conveying certain parts of an utterance as prominent and in marking a stretch of speech as a complete thought in itself or as a subpart of a larger unit. The systematic use of prosodic patterns, in effect, helps guide the listener through the organization of the discourse. In addition, such cues play an important role in conveying the speaker's intent. Work in the area of cross-cultural interaction suggests that miscommunication arises in part from non-native speakers' failure to make use of native-like prosodic conventions. These speakers may be misinterpreted as being rude or abrupt as a result of prosodic miscues (Gumperz, 1982) and their speech may be perceived by native speakers as disorganized and difficult to understand (Tyler, Jeffries & Davies, 1988).

Intonation or the use of pitch patterns in speech is one of the prosodic aspects which have been examined most extensively at the level of discourse. In this paper, discourse intonation is approached from the point of view of both research and pedagogy. In terms of research, the literature on the organizational functions of intonation in English discourse is first reviewed, followed by studies of discourse intonation including those of non-native speakers. This paper points out that a shift of focus from sound segments to prosody in the research field is not fully reflected in EFL pedagogy. The status of intonation in EFL classrooms is still secondary to that of vowel and consonant sounds due to a variety of reasons. As a result, the instruction of discourse intonation remains a challenging task in the EFL context.

The Role of Intonation in Discourse Organization

It is well established that intonation performs a variety of linguistic functions in communication simultaneously (Bolinger, 1989; Couper-Kuhlen, 1986; Johns-Lewis, 1986; Tench, 1990, 1996, among many others). Chun (2002: 56) defines the discourse functions of intonation as “a range of functions beyond the sentence level for the purpose of achieving continuity and coherence within a discourse.” While intonation serves various discourse purposes including turn management in conversation, this paper focuses specifically on its role in signaling the structure of discourse content, i.e., in marking the information structure and the topic structure of a discourse. The systems of information structure and topic structure are of particular interest because they are fundamental in speech. As Brown, Currie, and Kenworthy (1980) suggest, no meaningful utterance can be produced without reference to these two organizing systems. An utterance is either a part of an ongoing topic or it introduces a new topic. The speaker, in addition, is obliged to assign information status - new and given - to lexical items as the discourse proceeds. Intonation often co-occurs with lexical and grammatical devices to reinforce the speaker’s intended message (Thompson, 1994).

Information structure, defined as the organization of discourse into units of meaning, is often categorized as *new* versus *given* (Wennerstrom, 2001b). In terms of its intonational realization, new and given information is generally reflected by the use of high and low pitch, respectively (Brown, 1983; Chafe 1994). Brown (1983) examined instructional speech of native speaker pairs in a diagram-drawing activity and found that the speaker regularly introduced new discourse entities with indefinite referring expressions accompanied by a high pitch accent while referring to given entities with definite expressions and pronominals with low pitch. New information in the study was operationalized as items introduced into the discourse for the first time. On the other hand, given information was defined as previously introduced noun phrases. Brown (1983: 76) noted, however, that the use of pitch prominence depends not on the text sequence, but on “the speaker’s moment-by-moment assessment of the relationship between what he wants to say and his hearer’s informational requirements”. That is, pitch prominence is used to highlight the information that is not expected by the hearer, whereas pitch drop takes place when the information is already part of the hearer’s expectations.

In terms of topical segmentation, researchers have consistently observed that a shift in the speaker's pitch range serves as a topic boundary marker. That is, the beginning of a topic is often marked with raised pitch, with a gradual decline in pitch peaks toward the completion of the topic. The resulting structural units, which occur between the beginning of the topic boundary and the end, are referred to as *speech paragraphs*, *paratones* (Yule, 1980), *phonological paragraphs* (Tench, 1996), and *pitch sequences* (Brazil, 1997). The way prosodic cues mark the boundaries between topics in speech is analogous to the way the writer uses typographic cues such as indentation and blank lines to divide a written text into paragraphs.

Speech paragraphs have been observed in a wide range of discourse genres. In face-to-face interviews and conversations, Brown et al. (1980) observed high pitch peaks following a long pause when speakers initiated a topic or switched from one topic to another. The end of topics was usually marked by fading-away at the lexical and phonological levels. Lexically, the speaker may repeat lexical items already introduced or use tail-away phrases such as *and so on*, *and things like that*, etc. Phonologically, the speaker tended to speak low in the pitch range, use less amplitude, and leave a long pause at the end. In the narrative genre, Wennerstrom (2001a) found that speakers appeared to use intonation, in addition to lexico-grammatical devices such as deictic shift and time shift, to mark transitions between structural components. The instrumental analysis revealed that all speakers used the top 10 percent of their pitch range to signal transitions between major components.

Researchers who work on lecture discourse agree that native English speakers systematically use intonation to organize lectures into topic-based segments. Barr (1990) found that pitch raise corresponded with the beginning of sections in the lectures as indicated by the outline in the lecturers' handouts, the presentation of transparencies, and the blackboard display. Pickering (2004) examined the lectures of native English speaking teaching assistants which also reveal evidence of a systematic use of intonation cues to mark structural boundaries in their lectures. These speakers were found to consistently frame their topics with a high pitch raise and a low close. In many cases, these intonational cues co-occurred with other structural devices such as lexical phrases, e.g., *so*, *ok*, or *now*, at the beginning of a topic. Similarly, Thompson (2003) observed that

text-structuring metadiscourse, such as *first*, *next*, *well*, works in coordination with phonological paragraphing in signaling the hierarchical organization of academic lectures, particularly in introducing major topics.

It is apparent, based on the literature review, that native English speakers draw on intonational resources in structuring their speech. From the perspective of the listener, intonation also contributes to the interpretation of English discourse. Studies on the listener's perception of these cues suggest that intonation plays a significant role in the listener's interpretation of information structure and topic structure. The processing of discourse information is facilitated with appropriate accent placement; that is, with accented new information and deaccented old information (Bock and Mazzella, 1983; Birch and Clifton, 1995). In addition, discourse is segmented in relation to the presence of intonational cues (Hirschberg and Nakatani, 1996). The use of intonational cues in ways that match the listener's expectation often facilitates discourse comprehension, while use of the cues in a way that violates the listener's expectations slows down comprehension. This supports the notion that intonation is a critical element in communication.

Discourse Intonation and Non-Native Speakers of English

In light of the current emphasis on the communicative significance of intonation, a growing body of research on second language intonation has been done within the discourse domain. Comparative studies of native and non-native speech often reveal differences in intonation patterns between the two groups of speakers. In an experiment using oral reading and picture description tasks, Wennerstrom (1994) studied the use of English intonation in the speech of 10 native speakers and 30 non-native speakers from three language backgrounds: Thai, Japanese, and Spanish. Pitch analysis showed that native speakers' choices of intonational cues were consistent in marking information structure and topic boundaries in the discourse. They systematically raised their pitch on new or contrastive information and reduced it on redundant words assumed to be shared knowledge. At the topical level, they displayed the use of paratone or increase in pitch range to mark the beginning of a new topic. A quantitative comparison revealed that non-native speakers made fewer paragraph initial pitch distinctions than native speakers. In addition, the degree of deviation from the native norm varied among the three non-native groups. While Spanish speakers' performances

were most similar to those of English speakers, Thai speakers' speech diverged most significantly from the native norm. It was concluded that the varying amount of exposure to English in an English-speaking environment and different L1 backgrounds of the participants may have contributed to the distinctions.

In her 1998 study, Wennerstrom investigated English academic lectures of 18 Chinese speakers, referring to comparable lectures of 2 native speakers as the baseline. The correlation between the overall production scores as rated by three raters and four intonational variables was examined. The variables were the pitch difference between content words and function words, the use of high pitch at a phrase boundary to show connection with the following phrase, the use of pitch to differentiate contrast and given words, and the use of paratone to signal topic shift. Wennerstrom found that these pitch variables were used as predicted in the native speakers' speech. Among the Chinese, the use of pitch raise to signal topic structure was found to be the most significant predictor of their production scores. That is, the participants who received higher scores made more pitch distinction to mark topic shift. This suggests that topic initial pitch raise is one of the key features in spoken discourse that listeners attend to.

In comparing the teaching discourse of native speaker teaching assistants and Chinese and Indian teaching assistants, Pickering (2004) found that the intonation patterns in the two sets of data were substantially different. Native speaker lecturers systematically used intonation as an organizing tool in dividing their lectures into topics. They were found to consistently begin a topic with pitch raise and end it with pitch drop. Such a pattern, along with co-occurring lexical cues, provided a clear structure for students. The Chinese and Indian English speakers, on the other hand, did not vary their pitch in a systematic manner to mark topical organization of their lectures, making topic boundaries more difficult to recognize.

Research evidence thus far demonstrates that non-native speakers often fail to use intonation to signal meaning in discourse in target-like ways. Considering the fact that intonation is an essential cue for discourse interpretation, the failure on the part of non-native speakers to produce particular intonation patterns that native speakers consistently use in structuring discourse may cause difficulty for native listeners who look for such signals in establishing the information structure of the

discourse and conceptualizing the overall discourse in a coherent way. The findings in regard to non-native characteristics of intonational use suggest that discourse-level intonation is an area that deserves consideration in EFL instruction.

Discourse Intonation and EFL Instruction

While discourse-level intonation is gaining more and more recognition in the field of research, its pedagogical status in EFL classrooms has remained generally unchanged. There seems to be a large gap between research findings in this particular area of pronunciation and the application of these findings to the classroom. This is in spite of attempts to emphasize the significance of intonation in communicating meaning in the discourse context by several advocates of the discourse-based approach to intonation pedagogy (for example, Brazil, Coulthard, & Johns 1980; Chun, 1988; Clennell, 1997; Morley, 1991). This issue may be addressed with reference to a triad of factors involved in instruction: the learners, the teachers, and the teaching materials.

First, from the perspective of learners, segmental aspects of English, or those concerning vowels and consonants, have priority over prosodic elements such as stress and intonation. According to Derwing and Rossitier (2002: 162), segmental difficulties, rather than prosodic deviations, are perceived by learners as pronunciation problems that are more critical in communication. They are often unaware of the prosodic aspects due to the fact that these features are not represented orthographically the way vowel and consonant sounds are, thus are not salient in learning. Without explicit instruction, it is unlikely that learners will gain awareness of discourse-level intonation by themselves. This is particularly the case in EFL teaching-learning situations where language input is limited to the classroom setting.

Turning to the teacher factor, a large number of teachers do not have an understanding of the discourse functions of intonation to start with. One of the reasons is insufficient training in pronunciation teaching provided in teacher education programs. In China, for example, Zhang (2004) maintains that teachers do not receive adequate training in pronunciation teaching and are not aware of the importance of intonation in discourse because of an absence of such an element in

TEFL programs in the country. In some situations, teachers may not be cognizant of the overall significance of intonation. This is the case in Malaysia where TESL students believe segmental training is more useful than prosodic training in improving pronunciation (Rajadurai, 2001). It is natural to assume that such a belief is carried on into their teaching practice. In the Thai EFL context, the problem is the generally low quality of teachers and teacher training (Mackenzie, 2002).

Lastly, the fact that discourse intonation is a largely neglected area in EFL instruction is reflected in the majority of teaching materials which continue to present English intonation in a traditional, non-communicative way. As reviewed by Cauldwell and Hewings (1996) as well as Levis (1999), explanations provided in many pronunciation materials over the years still remain inadequate. Focus is placed primarily on the grammatical and affective aspects in which intonation is used to indicate sentence types and convey attitudes of the speaker. On the other hand, its communicative value at the discourse level is missing or inadequately explained. It is not uncommon that practice on intonation often occurs in isolated sentences out of context. One of the few exceptions is Brazil's (1994) *Pronunciation for Advanced Learners of English*, which highlights discourse intonation as focal in communication. However, the impracticality of the book in teaching situations has been reported by some EFL practitioners (Chapman, 2007; Hadley, 1996; Ranalli, 2002).

Of all the factors mentioned, the teacher factor appears to be the most critical one. For discourse intonation to become an integral part of teaching, it is essential, first of all, for teachers to be open to current thinking and findings in the area of pronunciation research and pedagogy. Learners, then, need to be made aware of the role of intonation in communication through contextualized teaching and learning that reflects the way intonation functions in connected speech. This may be done by supplementing current materials with discourse-based explanations and examples. The use of speech visualization technology has also been suggested as an aid in teaching discourse intonation (Chun, 1998; Levis & Pickering, 2004). With a clear display of pitch patterns in speech, learning features in spoken communication can be facilitated. Admittedly, the notion of discourse intonation is rather subtle for the general EFL student population. In practice, the extent to which discourse intonation should be incorporated in the classroom depends on the

proficiency level of learners as well as their communication needs. It may suffice just to raise basic awareness of the discourse level of intonation among less proficient learners in order to assist them in making use of intonational cues in understanding English discourse. On the other hand, more proficient learners whose aim is to be able to interact with native speakers may benefit from discourse-based practice of intonation in meaningful speaking activities.

Conclusion

An understanding of how intonation works in discourse is a requisite for effective communication, both in terms of perception and production. It is obvious, based on research evidence, that intonation is one of the linguistic resources that native English speakers systematically exploit in regulating discourse and that non-native speakers have difficulty with in this regard. While insights from research suggest a need for an integration of discourse-level intonation into classroom instruction, this is often not the case in EFL contexts. It is contended in this paper that teachers should broaden their perspectives in pronunciation teaching and find a practical approach in teaching discourse-level intonation that suits learners' needs and levels of proficiency. Because intonation is crucial for global communication and the ultimate goal of EFL instruction is to enable learners to communicate effectively, an inclusion of discourse-level intonation, though challenging, is eventually indispensable.

References

- Barr, P. (1990). The role of discourse intonation in lecture comprehension. In M. Hewings (Ed.), **Papers in Discourse Intonation** (pp. 145-155). ELR: University of Birmingham.
- Birch, S., & Clifton, C. (1995). Focus, accent, and argument structure: Effects on language comprehension. **Language and Speech** 38. 365-391.
- Bock, J., Mazzella, J. (1983). Intonational marking of given and new information: Some consequences for comprehension. **Memory and Cognition** 11. 64-76.
- Bolinger, D. (1989). **Intonation and its use: Melody in grammar and discourse**. Baltimore: Edward Arnold.
- Brazil, D. (1994). **Pronunciation for advanced learners of English**. Cambridge: Cambridge University Press.
- Brazil, D. (1997). **The communicative values of intonation in English**. London: Cambridge University Press.
- Brazil, D., Coulthard, M., & Johns, A. (1980). **Discourse intonation and language teaching**. London: Longman.
- Brown, G. (1983). Prosodic structure and the given/new distinction. In A. Cutler & D. R. Ladd (Eds.). **Prosody: Models & measurements** (pp. 67-77). Berlin: Springer-Verlag.
- Brown, G., Currie, K., & Kenworthy, J. (1980). **Questions of intonation**. London: Croom Helm.
- Cauldwell, R., & Hewings, M. (1996). Intonation rules in ELT textbooks. **English Language Teaching Journal** 50. 327-334.
- Chafe, W. (1994). **Discourse, consciousness, and time: The flow and displacement of conscious experience in speaking and writing**. Chicago: The University of Chicago Press.
- Chapman, M. (2007). Theory and practice of teaching discourse intonation. **English Language Teaching Journal**. 61 (1): 3-11.
- Chun, D. (1988). The neglected role of intonation in communicative competence and proficiency. **Modern Language Journal** 72: 295-303.
- Chun, D. (1998). Signal analysis software for teaching discourse intonation. **Language Learning & Technology**, 2, 61-77.
- Chun, D. (2002). **Discourse intonation in L2: From theory and research to practice**. Philadelphia: John Benjamins.

- Clennell, C. (1997). Raising the pedagogic status of discourse intonation teaching. **English Language Teaching Journal** 51: 117-125.
- Couper-Kuhlen, E. (1986). **An introduction to English prosody**. Baltimore: Edward Arnold.
- Cruttenden, A. (1997). **Intonation**. 2nd ed. Cambridge: Cambridge University Press.
- Derwing, T. & Rossiter, M. (2002). ESL learners' perceptions of their pronunciation needs and strategies. **System** 30: 155-166.
- Gumperz, J. (1982). **Discourse strategies**. Cambridge: Cambridge University Press.
- Hadley, G. (1996). A discourse approach to intonation: Can it work in Japan? **Niigata studies in Foreign Languages and Cultures** 2: 115-125.
- Hirschberg, J. & Nakatani, C. (1996). A prosodic analysis of discourse segments in direction-giving monologues. **Proceedings of the Thirty-fourth Annual Meeting of the Association for Computational Linguistics** (pp. 286-293). Santa Cruz.
- Johns-Lewis, C. (1986). **Intonation in discourse**. San Diego, CA: College-Hill Press.
- Levis, J. (1999). Intonation in theory and practice, revisited. **TESOL Quarterly** 33: 37-63.
- Levis, J., & Pickering, L. (2004). Teaching intonation in discourse using speech visualization technology. **System**, 32, 505-524.
- Mackenzie, A. (2002). EFL curriculum reform in Thailand. In A. Mackenzie, & T. Newfields (Eds). **Curriculum Innovation, Testing and Evaluation: Proceedings of the 1st Annual JALT Pan-SIG Conference** (pp. 59-67).
- Morley, J. (1991). The pronunciation component in teaching English to speakers of other languages. **TESOL Quarterly** 25: 481-520.
- Pickering, L. (2004). The structure and function of intonational paragraphs in native and nonnative instructional discourse. **English for Specific Purposes** 23: 19-43.
- Rajadurai, J. (2001) An investigation of the effectiveness of teaching pronunciation to Malaysian TESL students. **Forum**, 39, 10-15.
- Ranalli, J. M. (2002). Discourse intonation: To teach or not to teach? [On-line] Available: <http://www.cels.bham.ac.uk/resources/essays/Rannali4.pdf>
- Tench, P. (1990). **The roles of intonation in English discourse**. Frankfurt am Main: Peter Lang.
- Tench, P. (1996). **The intonation system of English**. London: Cassell.
- Thompson, S. (1994). Aspects of cohesion in monologue. **Applied Linguistics** 15: 58-75.

- Thompson, S. (2003). Text-structuring metadiscourse, intonation and the signaling of organization in academic lectures. **Journal of English for Academic Purposes** 2: 5-20.
- Tyler, A. (1992). Discourse structure and the perception of incoherence in ITA's spoken discourse. **TESOL Quarterly** 26: 713-29.
- Tyler, A., Jefferies & Davies, C. (1988). The effect of discourse structuring devices on listener perceptions of discourse. **World Englishes** 7: 101-110.
- Wennerstrom, A. (1994). Intonational meaning in English discourse: A study of nonnative speakers. **Applied Linguistics** 15: 399-420.
- Wennerstrom, A. (1998). Intonation as cohesion in academic discourse: A study of Chinese speakers of English. **Studies in Second Language Acquisition** 20: 1-25.
- Wennerstrom, A. (2001a). Intonation and evaluation in oral narratives. **Journal of Pragmatics** 33: 1183-1206.
- Wennerstrom, A. (2001b). **The music of everyday speech**. New York: Oxford University Press.
- Yule, G. (1980). Speakers' topics and major paratones. **Lingua** 52: 33-47
- Zhang, L. (2004). Awareness-raising in the TEFL phonology classroom: Student voices and sociocultural and psychological considerations. **International Journal of Applied Linguistics** 145: 219-268.