TEACHING CONTRASTIVE STRESS FOR VARIED SPEAKING LEVELS

Greta Muller Levis, Iowa State University John M. Levis, Iowa State University

Contrastive stress, in which words or syllables are emphasized to show their relationship to other words or syllables (e.g., It's not <u>unknown</u>, it's <u>well-known</u>), calls attention to how spoken lexical information is highlighted to express explicit and implicit comparisons/contrasts. By doing so, it evokes a set of possible referents and then uses pitch and length to select one referent from the group (Cowles et al., 2007). Although contrastive stress is common in conversational and planned speech, L2 English learners at all proficiency levels struggle with it, instead emphasizing repeated words (e.g., It's not unknown, it's well-known).

Contrastive stress is highly teachable at all levels of instruction and promotes comprehensibility improvement with even modest levels of instruction (Benner, Muller Levis & Levis, 2014; Levis & Muller Levis, 2018; Muller Levis & Levis, 2012). Improvement is evident in controlled and more communicative activities. This teaching tip includes a variety of controlled and communicative activities to teach the production of contrastive stress, including strategies to identify contrasts in written texts, to produce contrasts in asking about and expressing preferences, to express contrasts using simple pictures, and in using contrasts to correct and disagree.

BACKGROUND

Contrastive stress is an important and pervasive function of prominence in English speech. In regard to form, prominence (sometimes called sentence stress) is a suprasegmental feature of English that involves the use of pitch, syllable length, and/or loudness on the main stressed vowel to highlight particular syllables or words in discourse, contributing meaning at the phrase level. In general, every spoken phrase has a prominent syllable that begins the final pitch movement of the phrase (Bolinger, 1961). Functionally, prominence is used to call attention to semantic categories that are expressed by the speaker. It is essential to the expression of meaning in English, and it serves at least three commonly occurring functions in speech: providing a shape for English speech, signaling information structure, and marking contrasts.

The first function of prominence is to help give a rhythmic and melodic shape to English speech. This makes speech easier for native listeners to understand the speaker's message (Hahn, 2004). In this general function, prominence typically occurs on the last content word of a phrase or sentence, as in the sentences in (1). As many as 90% of spoken sentences have prominence on the last content word (Crystal, 1969). Notice that prominence in (1A, B, C) is expressed by a rise in pitch on the prominent syllable before a final fall in pitch at the end of the sentence. But prominence may also be marked by a fall in pitch (1D) before a subsequent rise, as is typical in utterances with rising intonation. In either case, native speakers of English in relatively careful speech almost always have a change in pitch on the prominent syllable, extra lengthening of the syllable, and perhaps extra loudness. PRAAT (http://www.fon.hum.uva.nl/praat/)

screen shots for sentence 1B and 1D are seen in Figures 1 and 2.

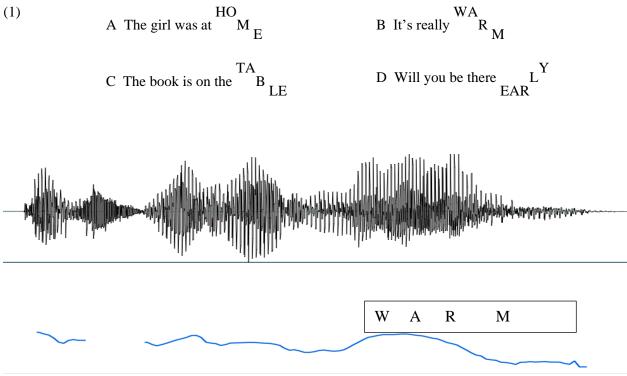


Figure 1. Pitch tracing of 1B "It's really WARM" with a rise to mark prominence.

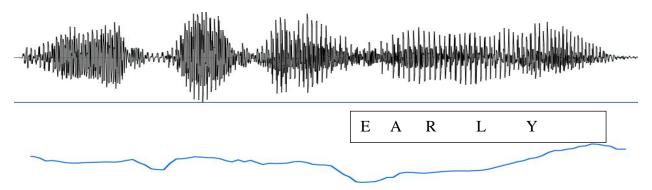


Figure 2. Pitch tracing of 1D "Will you be there EARLY?" with a drop to mark prominence.

The second function is the expression of information structure, that is, the highlighting of new information and the deaccenting of given information. This a common pattern in English, but we have found that it is difficult to learn quickly because it is cognitively demanding. This teaching tip does not address issues related to prominence's role in information structure. See Levis & Silpachai (2018) for a fuller discussion of how information structure is represented in pronunciation teaching materials.

The third function is the expression of contrasts, which may be used to call attention to explicit comparisons, to correct misinformation, or to imply connections to semantic categories that are not expressed (Levis & Muller Levis, 2018). We will refer to this as contrastive stress. This teaching tip will address contrastive stress because of our experience that it is an iconic use of prominence that learners understand quickly.

CONTRASTIVE STRESS

Contrastive stress is a special use of prominence that is not restricted by the patterns related to normal prominence (e.g., prominence on the last content word) or by the patterns related to information structure (i.e., prominence on the last content word of new information, see Hahn & Dickerson, 1999). Contrastive prominence can occur anywhere within an utterance, and on any word or part of a word, even if that word or syllable is typically unstressed. Even when contrastive stress occurs in normal places, it may be marked by greater pitch change and length than normal prominence.

Expressing a contrast is not the same as marking new information (Katz & Selkirk, 2011). Instead, it evokes special pragmatic meanings related to semantic categories (Cummins & Rohde, 2015). Contrastive stress is learnable at different proficiency levels, both for perception (Pennington & Ellis, 2000) and for production (Levis & Levis, 2012; Levis & Muller Levis, 2018; Muller Levis, Levis & Benner, 2014).

Contrasts may be explicitly or implicitly expressed by speakers, depending on the speaker's intention and whether they signal the intention fully (Bolinger, 1972). In the first example in (2), the explicit contrast of *down* and *up* seem to ask for both terms to be highlighted, but in the second, the highlighting of *up* signals a contrast with an unspoken directional semantic contrast. Since *up* is an unexpected direction to fall on stairs, the contrastive stress can be signaled successfully by the non-final prominence on *up*, and perhaps secondarily by the use of the adverbial "this time".

DOWN UP

(1) Explicit: It's easier to walk the stairs than the stairs.

UP

Implicit: I can't believe I fell the stairs this time. (implicit contrast to DOWN)

Normal prominence typically occurs on content words only, especially nouns, verbs and adjectives. Contrasts, on the other hand, can occur on any type of word. In the sentences in (3), the contrasts are on verbs, nouns, pronouns, prepositions, and even on prefixes.

(2) I like to <u>DRIVE</u> not <u>WALK</u>.

Do you prefer <u>COOKIES</u> or <u>CAKE</u>?

I don't like <u>HER</u>. I like <u>HIM</u>.

It's <u>ON</u> the chair, not <u>UN</u>der the chair.

It's an <u>UN</u>known quantity, not a <u>KNOWN</u> one.

As implied by the examples, it is common for there to be more than one contrast in a sentence, as in (4).

(3) I can <u>EAT</u> or I can <u>TALK</u> / but not to<u>GE</u>ther. <u>SHE'S</u> always <u>HAPpy</u> / but <u>HE'S</u> always <u>SAD</u>.

One of the striking things about many spoken contrasts is that they are expressed in sentences with parallel structures, as in (5). For teaching, we have found that teaching lexical frames is very important for helping students express contrasts in a way that listeners can identify.

(4)	The first house is	, but/while the second house is
	I like	more than
	The is	s better/worse than

TEACHING CONTRASTIVE STRESS

This section of the paper presents a way to teach contrastive stress. This is based on our experience teaching intermediate level ESL students in an intensive English program. See Levis & Muller Levis (2018) for a fuller account of the study. The paper is freely available at www.catesoljournal.org, the website for the journal. For a video describing this teaching tip, go to www.pronunciationforteachers.com, where you can find other teaching tips as well (https://www.pronunciationforteachers.com/teaching-tips.html).

The procedures for this teaching tip include two elements: "Notes to teacher" and "Student directions." The first part includes information that a teacher needs to know about each step in the teaching tip, while the second includes the activity portion of the teaching tip. This activity portion gives necessary descriptions of the activity and a brief summary of information for practice and understanding. The language practice can be recycled by students working individually, in pairs or in groups. It is also possible to do the full set of activities over several class periods. When we taught contrastive stress to intermediate students, we taught 25 minutes per day for six days. This teaching tip includes a sampling of what we included during that time.

The teaching tip is based on three principles. First, it ensures that the default use of prominence is presented and practiced before moving on to contrastive stress, a special case with a distinct function. Second, the activities are scaffolded. They start with exercises where students can focus on the pronunciation form, move on to activities where attention to form becomes more challenging but still possible, and conclude with activities that move away from reading altogether and encourage communicative use of the pronunciation point. Third, this teaching tip integrates

pronunciation with lexical and grammatical features. In this case, the use of contrastive stress is connected to the use of parallel structures that express contrastive stress more successfully.

Section 1 – Introducing/Reviewing Normal Prominence

Contrastive stress makes sense only in reference to what happens with normal uses of prominence. For this reason, it is worth briefly teaching or reviewing prominence before moving to the special case. It's also worth knowing that prominence is widely considered to be the most important suprasegmental feature in English pronunciation. Because it is critical for how messages are understood by native listeners (Hahn, 2004; Levis & Levis, 2010) and by nonnative listeners (Jenkins, 2000), it should be taught in all English teaching contexts.

Throughout the activities in this teaching tip, we move from more to less controlled, that is, from reading toward free description. All of the activities are intended to be simple but are also complex enough to challenge learners. This is especially the case when learners have to create comparison sentences spontaneously and without reading.

1. **Notes to Teacher**: Make sure that learners understand normal uses of prominence before moving on to contrastive stress.

Student Directions: Final prominence works for most sentences in English. Emphasize the underlined words with extra length and pitch movement.

The girl was at <u>home</u>. It's really <u>cold</u>. Try to be <u>early</u>. 5 + 4 = 9 2 + 3 = 5

2. **Notes to Teacher:** Normal prominence sometimes does not occur on the last syllable of an utterance. In these cases, it is important to avoid letting the voice pitch jump again at the end of the utterance. Instead, the voice pitch should stay low. In this activity, students should read the sentences, being careful to drop their voice pitch and keep it low on any words after the underlined words.

Student Directions: Practice pronouncing prominence when it is not the last syllable. In the second half of each sentence, emphasize the underlined word, but pronounce the last word very softly.

- a. She was there / but I didn't see her.
- b. I can't go / but I'd like to.
- c. I don't have a cat / but I want one.
- d. I found a dollar / but then I lost it.
- 3. **Notes to Teacher:** Students practice normal prominence in free speech. Have each student give a new sentence describing the picture. We deliberately use simple pictures that have enough variations for multiple students to describe without repeating each other's

sentences. Having 4-5 pictures like this one can ensure that all students can practice prominence by freely coming up with sentences describing different pictures.

Student Directions: Say a sentence to describe the house. (Next student: Give me a different sentence that describes the house in a different way, etc.)



Section 2 – Introducing Contrastive Stress

4. **Notes to Teacher:** When there are two or more things that are explicitly being compared, each of them is spoken with prominence. We call this contrastive stress. The explicitly compared words are usually the same types of words (such as two or more nouns, verbs, etc.). The beginning of contrastive stress should always start with explicit comparisons, preferably with the contrasting items at the end of phrases. In this way, learners can practice by producing contrasts with greater pitch and length than normal.

Student Directions: Listen to the sentences. Notice the extra length and pitch change on contrasting words.

I like to <u>DRIVE</u> not <u>WALK</u>. Do you prefer <u>COOK</u>IES or <u>CAKE</u>? I don't like <u>HER</u> jacket. I like <u>HIS</u> jacket.

5. **Notes to Teacher:** A slightly more challenging, but still controlled reading task is to use math sentences (Gilbert, 2001). The use of numbers adds additional cognitive load to the task because the words are not spelled. Numbers also add natural contexts for comparing multiple differences in pairs of equations.

Student Directions: Identify the contrasts in each pair of math sentences, then read the pairs aloud. Contrasts may be in numbers or other parts of the math sentences.

Example	5 + 4 = 9	but	$5+\underline{3}=\underline{8}$
	12 + 12 = 24	but	12 + 11 = 23
	1 + 8 = 9	but	2 + 8 = 10
	8 + 4 = 12	but	8 - 4 = 4

6. **Notes to Teacher:** This task uses the simple pictures from earlier, but it adds a similar picture of the same sort. Now the task is compare pictures, which will lead them to use contrastive stress. This activity primes them for Exercise 7, so teachers should avoid error correction.

Student Directions: Give a sentence comparing the two pictures. (We ask a learner to give us a sentence comparing the two pictures, then ask another learner to give us a different sentence comparing the pictures. You can use several pairs of pictures so that all learners have a chance to create a sentence.



7. **Notes to Teacher:** Comparing and contrasting is much clearer if the correct pronunciation is expressed with the right words and grammatical structures that support the suprasegmentals. Teaching students lexical frames helps them express contrasts efficiently and clearly. We teach two things in this aspect of the lesson: (1) use parallel grammatical structure for the contrasts, (2) use vocabulary that emphasizes contrasts: *but*, *while*, *or*, *not*, *other*, *another*, *the first*, *the second*, *better*, *worse*, etc. After teaching the lexical frames, repeat exercise 6.

Examples:	The <i>first</i> house is gray, <i>but</i> the <i>second</i> house is red.			
•	One house is	_, but the other house is		
	The house in the first picture has	while the house in the second		
	picture has			

Student Directions: Give another sentence comparing the two pictures. Use lexical frames that can help make your contrastive stress sound more obvious.

8. **Notes to Teacher:** Give students guided, meaningful practice. Have them practice with pictures and remind them about using grammatical structures. Learners can create several sentences in pairs and then say their best sentences for the class. Notice that the picture of the bears has the words "the bear on the right" above the left bear. We have found this makes the sentence creation even less controlled. Neither of the prompts provide any possible contrasting categorical terms (e.g., left, she), requiring that learners provide their own choices in the comparisons and in these parallel structures.

Student directions: Use the lexical frames to describe different contrasts in the pictures.

the bear on the right... while...



He ... but...



9. **Notes to Teacher:** Give students free, meaningful practice with other pictures. Do not provide grammatical structures so that learners can provide their own choices in the comparisons and in the use of parallel structures.

Student directions: Describe contrasts in the pictures.





Section 3 – Extending Contrastive Stress and Other Thoughts

10. **Notes to Teacher:** This teaching tip is centered around the guided and free use of picture comparison, so it is helpful to also connect contrastive stress to language functions that will be familiar to learners, such as choice questions. This helps to solidify the prosody they have been practicing In these and other structures, such as expressions of preferences, contrastive stress is normal. These types of structures can be used for guided, meaningful practice to practice contrastive stress by asking learners to express their own preferences and ask their own questions.

Student Directions: Student 1 - Ask your partner a choice question. Student 2: Respond to the question. Use the frames given in the example or make up your own. Start with the example question, but answer truthfully.

Example Which do you like better, VANILLA ice cream or CHOCOLATE ice cream? I like VANILLA best. But I also like CHOCOLATE.

Which do you like better		or	
cake – cookies	tea – coffee	beer – wine	candy – cookies
carrots – corn	juice – soda pop	Chinese food – Mex	kican food

CONCLUSION

The English way of calling attention to contrasts may seem obvious to the teacher, but it is not at all obvious to learners, especially to those whose languages do not call attention to contrasts in the same way that English does.

Contrastive stress makes sense if learners first understand the normal pattern, that is, when prominence occurs on the last content word. Contrasts are a special case of prominence in English, where the normal pattern does not hold. Contrasts are often expressed by using prominence in special ways: Contrasts may occur anywhere in a sentence, including on prepositions or pronouns, or even on prefixes.

In our experience, it is important to keep it simple in teaching contrasts, and avoid extremely complex examples. For instance, while there can be multiple contrasts in sentences, especially in the use of sayings, proverbs, and some academic language, these are highly stylized uses of contrastive stress and often have multiple ways to acceptably express the ideas.

Contrastive stress is not unusual. We use contrasts regularly in informal as well as formal language settings. It is also learnable by lower-level and higher-level learners of English.

ABOUT THE AUTHORS

Greta Muller Levis is Associate Teaching Professor at Iowa State University. She teaches topics such as Introduction to World Languages, Descriptive English Grammar, and Second Language Acquisition as well as English as a Second Language. She is the author of *Languages of the World: An Introduction* (Great River Learning, 2020). Email: gmlevis@iastate.edu

John M. Levis is Angela B. Pavitt Professor of English. He is the author of *Intelligibilty, oral communication, and the teaching of pronunciation* (Cambridge University Press, 2018), the editor of the *Journal of Second Language Pronunciation*, the founder of the Pronunciation in Second Language Learning and Teaching (PSLLT) Conference, and co-editor for the PSLLT Proceedings since 2010. Email: jlevis@iastate.edu

REFERENCES

Bolinger, D. (1961). Contrastive accent and contrastive stress. Language, 37(1), 83-96.

- Bolinger, D. (1972). Accent is predictable (if you're a mind-reader). Language, 48(3), 633-644.
- Cummins, C., & Rohde, H. (2015). Evoking context with contrastive stress: Effects on pragmatic enrichment. *Frontiers in Psychology*, 6, 1-11.
- Crystal, D. (1969). *Prosodic systems and intonation in English*. Cambridge: Cambridge University Press.
- Gilbert, J. (2001). Six pronunciation priorities for the beginning student. *CATESOL Journal*, 13(1), 173-182.
- Hahn, L. (2004). Primary stress and intelligibility: Research to motivate the teaching of suprasegmentals. *TESOL Quarterly*, 38(2), 201-223.
- Hahn, L., & Dickerson, W. (1999). *Speechcraft: Discourse pronunciation for advanced learners*. Ann Arbor: University of Michigan Press.
- Katz, J., & Selkirk, E. (2011). Contrastive focus vs. discourse-new: Evidence from phonetic prominence in English. *Language*, 87(4), 771-816.
- Jenkins, J. (2000). *The phonology of English as an international language*. Oxford University Press.
- Levis, G. M., & Levis, J. (2010). Authentic speech and teaching sentence focus. In J. Levis & K. LeVelle (Eds.), *Proceedings of the 1st Pronunciation in Second Language Learning and Teaching Conference* (pp. 135-144), Ames, IA: Iowa State University.
- Levis, G. M., & Levis, J. (2012). Learning to produce contrastive focus: A study of advanced learners of English. In J. Levis & K. LeVelle (Eds.), *Proceedings of the 3rd Pronunciation in Second Language Learning and Teaching Conference* (pp. 124-133). Ames, IA: Iowa State University.
- Levis, J., & Muller Levis, G. (2018). Teaching high value pronunciation features: Contrastive stress for intermediate learners. *CATESOL Journal*, *30*(1), 139-160.
- Levis, J., & Silpachai, A. (2018). Prominence and information structure in pronunciation teaching materials. In *Proceedings of the 9th Pronunciation in Second Language Learning and Teaching conference, ISSN* (pp. 2380-9566). University of Utah, September, 2017 (pp. 216-229). Ames, IA: Iowa State University.
- Muller Levis, G., Levis, J., & Benner, S. (2014). "Contrastive stress can be learned But can it be taught at lower levels?" Paper given at the Pronunciation in Second Language Learning and Teaching, Santa Barbara, CA. September, 2014. Ames, IA: Iowa State University.
- Pennington, M., & Ellis, N. (2000). Cantonese speakers' memory for English sentences with prosodic cues. *The Modern Language Journal*, 84(3), 372-389.