

FULL BODY TONE PRODUCTION AND TONE MNEMONICS

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The 6 tones in Vietnamese are difficult obstacles for L2 learners, in terms of both their production and perception. Clark and Paivio (1991) have suggested that learning can be enhanced by pedagogical techniques that create associations across multiple cognitive modalities. In the teaching tip described in this paper, we share a system of bodily gestures designed to help build awareness of Vietnamese lexical tones. This is rooted in the observation that students tend to instinctively move their body in some way when producing unfamiliar tones. The set of gestures corresponds to the distinctive features of the tones, such as a rising motion for the rising tone and a clap action for the Vietnamese tone containing a glottal stop. Words containing the target tone and the corresponding gestures are to be performed simultaneously. Supplementing this system with tone mnemonics has been beneficial, as students often have problems remembering what word contains what tone. Students have stated that when they are attempting to remember how a Vietnamese word is pronounced, they conjure a mental image of the word’s spelling, but the tone mark is absent (Nguyen, 2019). This suggests that visuals associating with the words can enhance students to remember the tone marks.

BACKGROUND

Acquiring lexical tone contrasts can be one of the most challenging aspects of learning Vietnamese. Vietnamese has 6 lexical tones¹⁰ that combine pitch height and various contour types (Brunelle, 2009). Perceiving and producing the distinctions between these tones is a fundamental, yet challenging, step for Vietnamese language learning. Learners must be able to not only pronounce the tones, but also to remember which tones are used in which words.

The six tones are typically written and named as follows¹¹:

(1)

o	ò	ó	ọ	ỏ	õ
ngang	huyền	sắc	nặng	hỏi	ngã

The diacritics above are approximations of the tone shapes. The typical way of describing the tones are with the following words:

(2)

Level	Falling	Rising	Heavy	Question	Broken
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¹⁰ There are 6 in the northern dialect of Vietnamese. The southern dialect has 5 lexical tones. The choice to focus on this variety is a result of the writers being instructors of the northern dialect.

¹¹ The letter “o” is included in these examples for explanatory purposes.

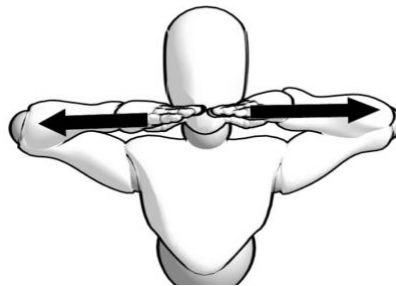
All Vietnamese words have one of the 6 tones, with numerous minimal pair distinctions that learners need to become familiar with alongside short-long vowel contrasts. Historically, Vietnamese acquired tones through a process of tonogenesis, originating in an interaction between vowels and final consonants. The resulting tones, therefore, will only occur in words with final consonants and/or vowels that allow for such a tone (Ferlus, 2004; Haudricourt, 1954). Thus, acquiring the distinction between the six tones affords the learner additional information for word recognition that extends beyond the perceptual recognition of the tones themselves. Below we will offer some techniques for helping students to identify and produce tones.

FULL BODY PRONUNCIATION INSTRUCTION

In order to enhance the saliency of the 6 tones in the classroom, full body movements can be used by both the students and the teacher. Clark and Paivio (1991) have suggested that learning can be enhanced by pedagogical techniques that create associations across multiple cognitive modalities. Kinesthetic learning activities have been used in the language classroom to associate movement with the target language, with generally favorable results (Kelly et al., 2009). With regard to lexical tone, several experiments (Chen, 2013; Morett & Chang, 2015; Zheng et al., 2018) have found that gestural techniques effectively improve students' awareness of Mandarin tones. With regard to Vietnamese tone learning, students tend to instinctively make some movements with their hands or neck when learning tones. The goal of the full body movements is to embrace that natural tendency to move with the tones. This is a good opportunity for the students to get up and move around, waking them up. The techniques we've devised are below but needn't be limited to these. The ideal techniques will arouse students' interest, making them engaged and want to join in. Most importantly, for each movement the tones should be spoken at the same time.

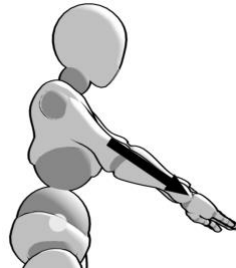
1. Level tone, 'Ngang'

Place hands with flat palms slightly below nose and draw slowly outwards. Keep hands at the same level throughout movement. A long flat mustache might be a useful visualization for students.



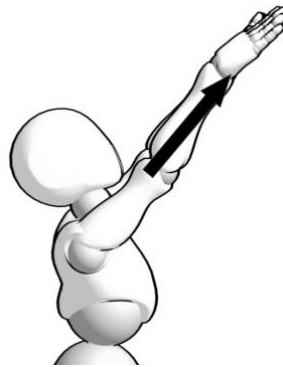
2. Falling tone, ‘Huyền’

Extend arms down with flat palms. Begin with elbows bent and slowly extend downwards. This and the previous tone will occur in words with long vowels and open syllables, so sustaining this movement for a longer period would be beneficial to the sound-movement correspondence.



3. Rising tone, ‘Sắc’

Extend arms upward with flat palms. Very similar to previous motion except upwards. This tone occurs in words with short vowels and final stop consonants, so make quick and sharp movements for this tone. This may be referred to as the ‘superman’ move.



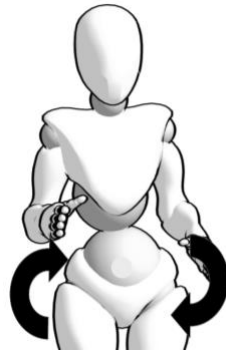
4. Heavy tone, ‘Nặng’

Make a fist with one hand and thrust it forward quickly with an abrupt and tense stop. This tone has a tense and heavy feel to it, so emphasize clenching the upper body. This tension will help to facilitate the creaky voice that typically accompanies this tone.



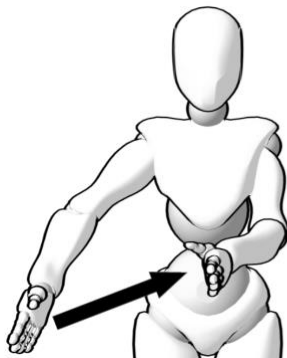
5. Question tone, 'Hỏi'

This movement consists of a single gyration of the hips with a slight squat. This movement tends to be the most fun for the students. This tone drops low and then comes back up. The more hips can move for this tone, the better.



6. Broken tone, 'Ngã'

Extend right hand to the side, while leaving the other in front of the torso. Bring the right hand in to clap the other, the resulting clap sending the left hand up and to the left. The clap should correspond to the glottal stop that normally occurs in the middle of this tone.









Tone Mnemonics

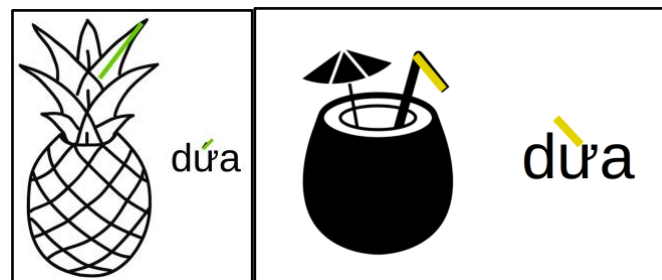
Another aspect of lexical tone learning lies outside basic perception or production. Remembering what word contains what tone is critical. Many students are only able to remember the

pronunciation of the segmentals, leaving out the tone from their mental conception. It's also been noted that students are well able to produce or perceive the tones, but in conversation they are likely to forget which tone to use altogether. A common issue that has been observed in our beginner level class is that many students don't use tones at all. When the instructor gives feedback by writing the word, these students are able to correct themselves. Students have stated that when they are attempting to remember how a Vietnamese word is pronounced, they conjure a mental image of the word's spelling but the tone mark is absent (Nguyen, 2019). Vietnamese tones can be easily visualized in terms of slopes and curves, as seen previously in this paper. The integration of these simple visuals into more complex pictures provides a rich context which can aid learners' memorization.

Mnemonic techniques have been applied to the learning of vocabulary, grammatical rules such as grammatical gender, adjective-noun order and preposition selection (Paivio and Desrochers, 1981). In the following technique, the tone is associated with a feature of an image. We have developed a simple system of color-coded tone symbols that are inserted into each picture, seen below.

 Rising	 Falling	 Level
 Broken	 Question	 Heavy

The simple images serve not just to help to memorize the tone sounds, but to help with spelling as well. The shape of these symbols corresponds roughly to the shape of the diacritics used in writing Vietnamese. The examples included below are a few of the words that we've taught in class.



The leaves pointing upward on the pineapple (*dưa*) are associated with the rising tone, whereas the straw pointing down in the coconut (*dừa*) illustrates the falling tone. This mnemonic gives

students an opportunity to synthesize the visuals with the sound of the tone. We encourage the students to adopt this mnemonic technique to build their own cards. We offer a presentation template to the students containing the symbol system that we use (contact the authors for a copy of the template). Below are a few more examples of mnemonics that students have developed for their own practice. The words, in order, mean *dog*, *to fall* and *to sleep*.



With more abstract concepts, like *ngủ* (sleep), more creative mnemonics need to be developed. In this case the student thought of a girl with curly hair asleep. We've found that students will come up with some surprising associations between tone and meaning to develop these. Encouraging students to think openly about the possible associations that could occur is key.

An important caveat that must be mentioned with the mnemonic images is that they are inherently open to interpretation. It is possible, for example, that students may remember the coconut straw having an upward angle instead of sloping downward, leading them to associate the incorrect tone. Therein lies the danger of using these associative concepts without a proper framework. This is why it is suggested that the color-coded tone symbols are used consistently and systematically when presenting these mnemonics to students. Some drills and games in which students are trained to recognize these symbols is an important part of their introduction to the classroom.

According to our preliminary classroom observations, these mnemonics and full body techniques have shown to be quite useful to students who are learning Vietnamese tones. Students tend to see tones in a different light than segmental features. In practice, students tend to grasp the tones very quickly. But building their awareness and sensitivity to the tones is critical to developing the psychological reality of lexical tones for the learners. Creatively embracing the nature of tones is what we advocate for. Future experimental research will be needed to show if these techniques hold up to scrutiny.

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Mark Sakach is currently a small business owner in Flagstaff, Arizona. While he was still a student, his interest areas included speech perception, mainland southeast Asian sociolinguistics, and the relationship between sound symbolism and second language phoneme acquisition. He can be reached at mark@greenfleetaz.com

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