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WHAT'S HOT, WHAT'S NOT? INSIGHTS FROM PRONUNCIATION PRACTITIONERS

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An important discussion forum in today's global Applied Linguistics community is the electronic mailing list (e-list), which provides practitioners with an online discussion venue for the exchange of information and ideas. This paper summarizes discussions held on a moderated invitational e-list comprising an international community of pronunciation practitioners. The authors, both members of the e-list, share highlights from their research into those discussion topics (strands) and discussion sub-strands (threads) that generated the greatest amount of discussion over a one-year period.

INTRODUCTION

An important discussion forum in today's global Applied Linguistics community is the electronic mailing list (e-list), which provides practitioners with an online discussion venue for the exchange of information and ideas. In this paper, we summarize discussions held on a moderated e-list comprising an international community of pronunciation practitioners. Membership on this e-list, which numbers around 170, is invitational, and is based on participants' research and publications in the field.

In the e-list, participants have the options of: (1) generating a new discussion strand by asking a question or stating an opinion; (2) responding to other participants' points of view on a previously-initiated discussion strand; (3) sharing knowledge/resources on a topic in response to queries put out to the e-list; and (4) passively participating in the e-list by reading others' e-list postings. Other options on the e-list fall under the "housekeeping" category; these include such tasks as the nomination of new members and their introduction to e-list members as well as the dissemination of email and other contact information among members.

As members of the e-list, our goal in this study is to share highlights from those discussion topics (strands) and discussion sub-strands (threads) that generated the most discussion over a one-year period. This paper follows on the study by Brinton and Goodwin (2006), which used the same pronunciation specialist e-list to investigate pronunciation specialists' views on World English, intelligibility, and pronunciation standards. As Brinton and Goodwin note, the e-list discussion displays "the pronunciation specialists' desire to sort out misconceptions and determine teaching priorities" (p. 32). Given this desire, and especially given the recognized status in the field of the e-list's membership, the information communicated in the discussion postings is of great potential interest to the more general public of pronunciation practitioners.

Research Questions

For the purpose of this study, we were interested in pursuing the following questions:

1. Which topics are of current interest to international pronunciation specialists?
2. Of these, which topics elicited the greatest amount of response from the pronunciation specialists?

METHODS

We opted to analyze discussion strands and threads from the one-year period August 2013 to August 2014. From our initial sampling, we narrowed our analysis to the four topics that generated the greatest amount of discussion using the following selection criteria:

1. Topics with a minimum of 7 discussants; and
2. Topics with a minimum of 13 exchanges.

Applying these criteria, we identified four discussion strands. We then downloaded the discussants' comments into a separate document to facilitate our task in summarizing the main ideas and created a separate document to capture the references shared by the discussants on the four topics (see Appendix).

RESULTS

As Brinton and Goodwin (2006) note, "Listserv discussions have a life of their own. Although an initial posting can spawn numerous responses, discussion is not orderly, nor are discussants constrained to comment on or answer the original posting" (pp. 31-32). This characterization certainly holds true for the e-list discussion strands that we analyzed, some of which (e.g., Pronunciation and the Common European Framework of Reference) morphed into new discussion strands (e.g., The role of pronunciation in speaking test ratings). The non-linear nature of the e-list discussion presents some challenges to the researcher attempting to make sense of the different threads in each strand. On the other hand, the authentic nature of the discussion allows for disagreements among specialists to be voiced and for attempts at consensus reaching which make for fascinating reading.

Sample Discussion Strands

The following discussion strands provide a flavor for the types of issues discussed by the pronunciation specialists and represent the main topics discussed by the specialists during the time period in question.

Table 3

Sample Discussion Strands on the E-list, 2014

▪ Pronunciation as a motor skill	▪ IPA vs. "IPA-like" symbols
▪ Perfect vs. relative pitch	▪ Charts for English pronunciation
▪ The role of pronunciation in speaking test ratings	▪ Measuring L2 proficiency
▪ Syllabification for pronunciation	▪ Exemplary qualitative research
▪ Is second language (L2) fluency more important than pronunciation?	▪ What is a vowel really?
▪ Pronunciation and the Common European Framework of Reference	▪ Mondegreens

E-list Strands Generating the Most Discussion

Applying the above-stated criteria for selection, our analysis of the discussion strands was narrowed to four topics, as detailed in Table 2. The synthesis of each topic follows.

Table 2

E-list Topics Generating the Greatest Amount of Discussion and/or Controversy

Topic	# of Participants	# of Exchanges
Perfect vs. relative pitch	10	22
Pronunciation as a motor skill	11	35
The role of pronunciation in speaking test ratings	10	15
Syllabification for pronunciation	7	15

Topic 1: Pronunciation as a Motor Skill

The e-list posting which initiated this discussion strand posed the question of whether pronunciation is first and foremost a motor or a cognitive skill. For the purposes of the discussion, a motor skill was defined as involving a motor or muscular component that must be learned and voluntarily produced to proficiently produce the sounds of the language. A cognitive skill, on the other hand, was defined as involving the formation of concepts in order to categorize sounds according to the phonology of the language.

E-list participants were quite divided in their opinions on this topic, with the minority opinion represented by the assertion that pronunciation is primarily a motor skill (though the cognitive component is indispensable). Arguments proffered in support of this view included the following:

1. 146 head-and-neck muscles are directly involved in speech.
2. These muscles must be coordinated and fine-tuned to perform their acts.
3. Deliberate practice and multiple repetitions are required for automatization of articulation to occur (Ericsson, Krampe, & Tesch-Römer, 1993). Once automatic, it runs smoothly without conscious attention.
4. These motor processes are stored in procedural memory, which is stable throughout life. As such, they cannot be forgotten.
5. With automatization of the speech processes, the brain is free to add emotion and expression to the content of speech (without having to think about the mechanics of the performance).

The majority opinion for this strand was represented by the assertion that pronunciation is primarily a cognitive skill (though the motor skills are certainly involved). Arguments in support of this view included the following:

1. In order to learn pronunciation, concepts are formed. It is the brain that stores these new concepts and controls their execution.
2. Unfamiliar L2 sounds are processed by two different networks—the conscious or declarative and the unconscious or procedural.
3. Anderson's ACT theory (ACT-R Research Group, 2002-2013) applies. Developing L2 pronunciation skills entails acquiring a form of expertise that becomes increasingly automatized.
4. Ultimately, pronunciation is a complex interplay of physical, perceptual, cognitive, and psycho-social factors.
5. Research on severe hearing loss in adults provides evidence that acquiring or maintaining a sound system is not primarily a motor skill (Lane & Webster, 1991).
6. Learning the motor skills involved in L2 pronunciation is a very conscious activity (i.e., one requiring brain resources). With time it becomes unconscious.
7. The nature of uptake to automated procedures is important to understand. What learners attend to consciously when learning a new sound is different (and separate) from what the subconscious automated networks are processing.

The consensus of this discussion strand is best summarized by the following comment from an e-list participant who had not been otherwise active in this discussion strand: "In fact, I've been a little bemused that we have been having this discussion. Of course pronunciation (in particular, finding the right articulatory settings) becomes highly automatized with practice. But developing an L2 pronunciation (including the relevant articulatory settings) entails acquiring a form of expertise. As with many other types of expertise, the way in which we develop it has to be accounted for in cognitive terms."

Topic 2: Perfect vs. Relative Pitch

The query initiating this second discussion strand asked if speakers of certain languages (e.g., Vietnamese, Mandarin) have a higher incidence of perfect pitch—with perfect pitch defined as the ability to hear any note of the scale out of context and identify which note it is. Relative pitch, conversely, can be defined as the ability to identify a given note on the scale by comparing it to a reference note and identifying the interval between the two notes.

This discussion strand generated much less controversy than the previous one, with discussion participants citing the following research findings in support of the assertion that speakers of tonal languages do indeed have a higher incidence of perfect pitch:

1. NSs of tone languages have a far higher incidence of perfect pitch than NSs of non-tone languages (Deutsch, 2006; Deutsch, Henthorn, & Dolson, 2004).
2. Having absolute pitch and being a first language (L1) speaker of a tonal language may make it more difficult to learn the prosody of a non-tonal language given the importance of relative pitch
3. L2 learners can develop "echoic memory"—allowing the shape of the pitch to echo in their head and thus facilitate the learning process.
4. Musicians can learn tonal contrasts more efficiently than non-musicians (Kraus & Chandrasekaran, 2010).
5. L1 Chinese speakers tend to speak English with an overall higher pitch than NS due to the lack of voiced obstruents in their L1.

Discussion participants also ventured opinions about the application of these findings to the second/foreign language classroom, as follows:

1. Absolute pitch is not the issue. Learners just need to hear pitch patterns through a different filter.
2. We have yet to account for learners who are musicians and yet have amazingly unmusical prosody.
3. A useful strategy to aid learners in reproducing pitch is to have them follow the shape with their hands.
4. Leaving a pause between the "listen" and "repeat" stages helps learners to hear an accurate internal echo.

Topic 3: The Role of Pronunciation in Speaking Test Ratings

The query initiating this third discussion strand explained that a graduate student wanted to do her thesis on the role that pronunciation plays in speaking test ratings and thus desired recommendations of rubrics to assess ESL speakers' mastery of different features of English pronunciation. Recommendations of systems for rating speaking generally, in an overall, holistic way, were also sought.

It was noted that some pronunciation textbooks contain diagnostic checklists or speech profile forms that are used for initial, diagnostic purposes, e.g., Prator and Robinett's (1985) *Manual of American English Pronunciation*, Grant's (2010) *Well Said*, and Henrichsen, Green, Nishitani, & Bagley's (2009) *Pronunciation Matters,* with the remark that diagnosis is not necessarily the same as evaluation.

Several rating systems that include components related to speaking were discussed on the e-list. The Student Oral Language Observation Matrix (SOLOM) (Center for Applied Linguistics, n.d.) is a rating scale that teachers can use to assess their students' command of oral language on the basis of what they observe on a continual basis in a variety of situations. Pronunciation is one of five factors of this instrument designed for school children. The Common European Framework of Reference for Languages: Learning, Teaching, Assessment, (CEFR) is a guideline used to describe achievements of learners of foreign languages across Europe and, increasingly, in other countries (Council of Europe, 2011). CEFR, which is not targeted for any particular language, emphasizes *Can-do* statements, what a learner can do in particular interactions; however, the descriptors do not deal specifically with pronunciation. The Pronunciation Scoring Guide in Chan's (2009) *Phrase by Phrase: Pronunciation and Listening in American English* was also offered as a system for rating pronunciation holistically. These rating instruments consist of five or six levels. Table 3 compares the Level 4 descriptors of these instruments. For comparative purposes, Level 4 of the International Civil Aviation Organisation (ICAO) Language Proficiency Rating Scale, used to assess those employed in air-traffic communications, is also included. This rating scale consists of six skill areas and six proficiency levels.

Table 3

Level 4 Descriptors of four oral assessment rubrics

Rubric	***Description***
CEFR B2+ **Level 4 of 6**	In informal discussion with friends: Can keep up with an animated discussion between native speakers. Can express his/her ideas and opinions with precision, present and respond to complex lines of argument convincingly. Formal Discussion & Meetings: As above + Can identify accurately arguments supporting and opposing points of view. Can and respond to complex lines of argument convincingly.
SOLOM **Level 4 of 5**	Fluency: Speech in everyday conversation and classroom discussions generally fluent, with occasional lapses while the student searches for the correct manner of expression. Pronunciation: Always intelligible, although the listener is conscious of a definite accent and occasional inappropriate intonation patterns.
ICAO	Operational – Passing level. Produces stretches of language at an appropriate

Language Proficiency Rating Scale Level 4 of 6	tempo. There may be occasional loss of fluency on transition from rehearsed or formulaic speech to spontaneous interaction, but this does not prevent effective communication. Can make limited use of discourse markers or connectors. Fillers are not distracting.
Pronunciation Scoring Guide **Level 4 of 6**	Functionally competent. The speaker demonstrates functional competence in pronouncing English. Speech is generally intelligible, especially with a concentrated effort at listening. Demonstrates adequate pronunciation of words and phrases to convey global meaning. May occasionally delete or add sounds to words and display some hesitations. May contain some serious errors in phonemes, word stress, intonation, and sentence focus that occasionally obscure meaning.

Assessing pronunciation requires a consideration of the interplay of segmental, suprasegmental, and delivery elements. Speaking and pronunciation rubrics have descriptors that rely on subjective interpretation. In addition, the type of speaking task can affect the pronunciation of a learner/examinee. To date, no detailed version of pronunciation rubrics for any high-stakes testing situations exists. E-list participants seemed to agree that it would be helpful to have descriptors that reflect more closely the processes that learners actually have to employ rather than the inputs they can be expected to handle and/or the tasks that can be demanded of them.

Topic 4: Syllabification for Pronunciation

The query that launched the fourth discussion strand asked for colleagues' reactions to the idea of displaying spoken syllabification instead of written syllabification, along with the syllable-stress code, in a book for learners whose need for English is mainly oral. For example, instead of the typical dictionary word division de·vel·op·ment·al, print de·ve·lop·ment·al [4-3].

Written syllabification is based mostly on etymological or morphological principles and keeps meaning intact for dividing words in written form, especially when writing by hand. On the other hand, spoken syllabification is based mostly on phonemic principles and maximal onset, and it provides a phonological surface structure and a phonetic plan for actually speaking an utterance.

Table 4

Syllabification in English

Written	***Spoken***
learn·ing	**lear**·ning
de·vel·op·**ment-**al	de·ve·lop·**men-**tal
psy·**chol**·o·gist	psy·**cho**·lo·gist
stretch·ing	**stre**·tching

This query raised questions about the basis for the syllabification. One problematic point is the property of ambisyllabicity. Should *lemon* be divided lem·on or le·mon? The <m> in this word

seems to belong to both syllables (lem·mon), e.g., le(m)·on. Ambisyllabicity occurs when a syllable with a lax vowel is followed by a weak syllable with schwa and there is only a single consonant letter linking them. In contrast, ambisyllabicity does not apply to the word *demon*, de·mon, in which the first syllable is a tense vowel.

Another problem involves orthographic representation and phonemic constraints. Should *mistaken* be divided: mis·tak·en or mi·sta·ken? Should *backup* be divided back·up or ba·ckup? In these examples, the second syllabification, where the syllable-final consonant is shifted to the beginning of the next syllable, causes unchecked lax vowels [mɪ] and [bæ], which are theoretically not permitted in English phonology. Furthermore, a syllable beginning with the letters <ck> is not permitted in written English.

Discussants generally supported the concept of teaching spoken syllabification and endorsed an approach to pronunciation that takes account of the perceptual reality of Selkirk's (1982) principle of maximal onset, in which word-final consonants getting shifted when the following syllable begins with a vowel. Some participants shared the ways in which they presented and tested syllabification and stress in class. This strand concluded with a suggestion that the discussant use the syllabification that seems intuitively right.

DISCUSSION

Being part of a pronunciation e-list provides opportunities for researchers and practitioners to share interests, materials, methods, and other information. In the time period of this particular study, the topics that generated the most discussion from the greatest number of participants were (1) Perfect vs. relative pitch, (2) Pronunciation as a motor skill, (3) The role of pronunciation in speaking test ratings, and (4) Syllabification for pronunciation. Through these electronic discussions, participants have been able to learn about relevant research that can be applied to teaching, learning, and writing of materials and assessments. Moreover, such a forum enables us to compare, challenge, debate, change and/or confirm ideas.

While the results in this study were gleaned from discussions in a closed e-list, the general public can find many opportunities to discuss pronunciation in open electronic discussion and social media groups. Below are other such groups in which the authors participate:

1. TESOL SPLIS Speech Pronunciation & Listening Interest Section www.tesol.org > Connect > TESOL Interest Sections > SPLIS: http://www.tesol.org/connect/interest-sections/speech-pronunciation-and-listening
2. CATESOL TOP-IG Teaching of Pronunciation Interest Group: http://bit.ly/top-ig
3. LinkedIn: www.linkedin.com
   Groups, such as Accent Reduction Specialists, Communication and Accent Neutralization
4. Facebook: www.facebook.com Pages, such as IATEFL's Pronsig page: https://www.facebook.com/pages/Pronsig/460534014066126

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APPENDIX

Sources Provided by E-list Participants.

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