

Clinical Competency and Accent Reduction: Cultural and Linguistic Considerations in Treating Accentedness

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Session Objectives

- As a result of attending this session, participants will be able to:
 - Explain how one's native language contributes to a foreign accent in one's target language
 - Discuss methods of accent reduction beyond phoneme acquisition
 - Describe how cultural considerations may affect perceptions of a speaker's foreign accent and intelligibility

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Outline

- What is a foreign accent?
 - Linguistic Considerations
 - Phonetics and phonology
- Attitudes, perception and intelligibility
 - Cultural Considerations
 - Sociolinguistics
- Implications (of each) for accent modification
- Client intake and outcome forms

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What is a Foreign Accent?

- Multiple studies show clear bias against certain accents:
- Seeing an Asian face can make speech sound more accented (Rubin, 1992; Rubin et al., 1999; Rubin & Smith, 1990; Yi et al., 2013; Yi et al., 2014; Zheng & Samuel, 2017)

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What is a Foreign Accent?

- Have you ever had an instructor with a foreign accent?
- Who is judging accentedness/intelligibility?
 - The listener (judging the speaker)
- As with any assessment of intelligibility, this is subjective: how much of the speech could the listener understand (Gurevich & Scamihorn, 2017)
 - Sensitive to context

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What is a Foreign Accent?

- Phonetics
 - Sounds of human languages
 - Universal
 - Articulation/acoustics
 - Phones
- Phonology
 - Language-specific
 - Organization (sound systems) and rules of the sounds in one's language
 - Phonemes

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Consonants in Human Languages

	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	glottal
Plosive	p b			t d		ʈ ɖ	c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ		n		ɳ	ɲ	ŋ	ɴ		
Trill	ʙ			r					ʀ		
Tap/flap				ɾ		ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative				ɬ ɮ							
Approximant	w	ʋ		ɹ			j	ɰ			
Lateral approximant				l		ɭ		ʟ			

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Phonetics & Phonology

Phonetics

- Physical sounds in human speech
 - Principles underlying the production of sounds
 - i.e., place & manner of articulation of sounds (e.g., alveolar stop, nasal)
 - Principles underlying the acoustic properties of sounds
 - E.g., features of plosives; formants of vowels
- Universal (=the same across languages)
 - All /t/ sounds in all languages are alveolar voiceless stops

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Phonetics & Phonology

Phonology

- The **organization** and **rules** of the sounds of one's language
 - A subset of the sounds of all human languages
- These are language-specific
- Distinguish between
 - Phones (sounds)
 - Phonemes (sounds that hold meaning in a language)
 - Allophones (contextual variations of phonemes)

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What is a Foreign Accent?

- The **organization** and **rules** of the sounds of one's language
- Inventory mismatch
 - English speaker learning Greek doesn't already have velar fricatives: x, ɣ
 - Might pronounce these as closest native sounds: h, ɣ
 - Russian speakers don't have θ, and often substitute s in English: 'bathroom': 'ba_srum
 - Hebrew speakers don't have θ, and often substitute t in English: 'bathroom': 'ba_trum
- >> First source of a foreign accent

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Consonants

	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	glottal
Plosive	p b			t d		ʈ ɖ	c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ		n		ɳ	ɲ	ŋ	ɴ		
Trill	ʙ			r					ʀ		
Tap/flap				ɾ		ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative				ɬ ɮ							
Approximant	w	ʋ		ɹ			j	ɰ			
Lateral approximant				l		ɭ		ʟ			

	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	glottal
Plosive	p b			t d				k ɡ			
Nasal	m			n							
Trill				r							
Tap/flap											
Fricative		f v	θ ð	s z				x ɣ			
Lateral fricative											
Approximant							j				
Lateral approximant						ɭ					

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What is a Foreign Accent?

- Phonemic organization:
 - Can predict some problems d/t mismatch between native phonemic inventory and inventory in target language

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What is a Foreign Accent?

- The **organization** and **rules** of the sounds of one's language
- Phonological rules
 - Speakers of a language apply these rules automatically
 - It's hard to inhibit their application
 - We notice when these aren't used
- >> Second source of a foreign accent

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Phonological Rules

- The plural/3rd person sg/possessive suffix '-s'
- Cat/cats (sg/pl); I do/she does (3rd person sg); Mary/Mary's dog (possessive)
- This morpheme = phoneme /s/, and it has 3 allophones:

cats	/s/	[s]	after voiceless sounds (packs, cops, moths)
dogs	/s/	[z]	after voiced sounds (trees, leads, bars)
bus	/s/	[əz]	after sibilants (garages, badges, matches, brushes)

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Phonological Rules

- Apply rules on the go
- Some argue that "it's just difficult to say [dɔgz]"
- Yes, difficult for English speakers because our instinct is to apply the rule

cf. dogs [dɔgz] vs dogsled [dɔgzslɛd]

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Phonological Rules

- Aspiration of voiceless stops
 - p, t, k → p^h, t^h, k^h at start of stressed syllables
 - 'cat' /kæt/ [k^hæt]
 - (but not voiced: 'got' /gɒt/ [gɒt])
 - 'took' /tɒk/ [t^hɒk]
 - (but not voiced: 'dot' /dɒt/ [dɒt])
 - 'cab' /kæb/ [k^hæb]
 - (but not voiced: 'gab' /gæb/ [gæb])

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Phonological Rules

- Application and inhibition
 - Native speakers of a language automatically apply its rules
 - Non-native speakers must learn the rules
 - Speakers of a new language must inhibit their native rules

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Rules: Examples from other languages

- Modern Greek
 - /s/ is voiced to [z] before most voiced consonants

/svino/ → [zvino] 'extinguish'

/kosmos/ → [kozmos] 'world'

/kosmos mu/ → [koznozmɯ] 'my world'
 - Foreign speakers of Greek don't automatically apply these rules
 - Greek speakers often apply this rule when speaking English
 - 'smile' /smaɪl/ → [zmaɪl]

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Rules: Examples from other languages

- Korean alveolar liquid (the phoneme /l/)
 - Word finally the phoneme is produced as [l]
 - Word initially and elsewhere [ɾ]
- Korean speakers of English may automatically apply this rule
 - 'bear' /beɪ/ → [beɪl]
 - 'rice' /aɪs/ → [aɪsɾ]

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What is a Foreign Accent?

- A speaker of a new language can be affected by native language:
 - Inventory of sounds
 - Mainly sounds in new language that aren't in native language
 - At first, usually solved by using closest sounds from native language
 - Phonology rules
 - Speaker of a new language must learn these from interaction and experience
 - Speaker of a new language must inhibit use of native language's rules (made harder by not realizing there are rules)

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Cultural Considerations

- Accents trigger attitudes about oneself and about a speaker
- Changing accent >> changing self
- Why would someone want to change their accent?
 - Our clinical decision should come from place of understanding of cultural biases, professional needs, and attitudes of speakers and listeners
- Impact of accentedness is not necessarily proportional to "thickness" of accent

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Implications for Accent Modification

- An informed clinician
 - Does not treat the accent as a disorder
 - Does not assume the client's feelings about own accent are negative
 - Does not assume a thicker accent impacts one's life more
 - Does not reduce decisions to matters of intelligibility

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Next step: Intake and Outcome Measures

- Client intake form
 - Phono organization
 - Phono rules
 - Reasons for seeking change
- Accent impact index

Consonants

	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p, b			t, d							ʔ
Fricative		f, v		s, z			ç, ʝ	x			h
Nasal	m			n			ɲ	ŋ			
Tap/Flap				ɾ							
Liquids				l, ɭ							
Proximate											
Lateral fricative											
Approximant											
Lateral approximant											

Vowels

	Front	Central	Back
Close	i, ɨ, ɜ, ɯ		u, ʊ
Close-mid	e, ɛ		ɤ, ɘ
Open-mid	ɛ, ɜ		ɔ, ɘ
Open	a, ɶ		ɔ, ɶ

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