

Phonetic grounding of vocal skills development courses focused on public speaking, stage speech and singing at Czech universities

presumptions

- human voice is the most common means of interpersonal communication [1]
- phonetic knowledge can usefully inform vocal skills development
- many voice professionals in the Czech Republic do not come from a phonetic-based education
- voice pedagogy can lack theoretical background [2]

aims

- examine literature used in university courses focused on vocal skills development
- identify main topics in each publication
- assess how presented methods are informed by phonetic knowledge in 5 domains
- establish a framework for empirical validation of these presented in vocal pedagogy

singing courses



tempo/rhythm discussed scarcely

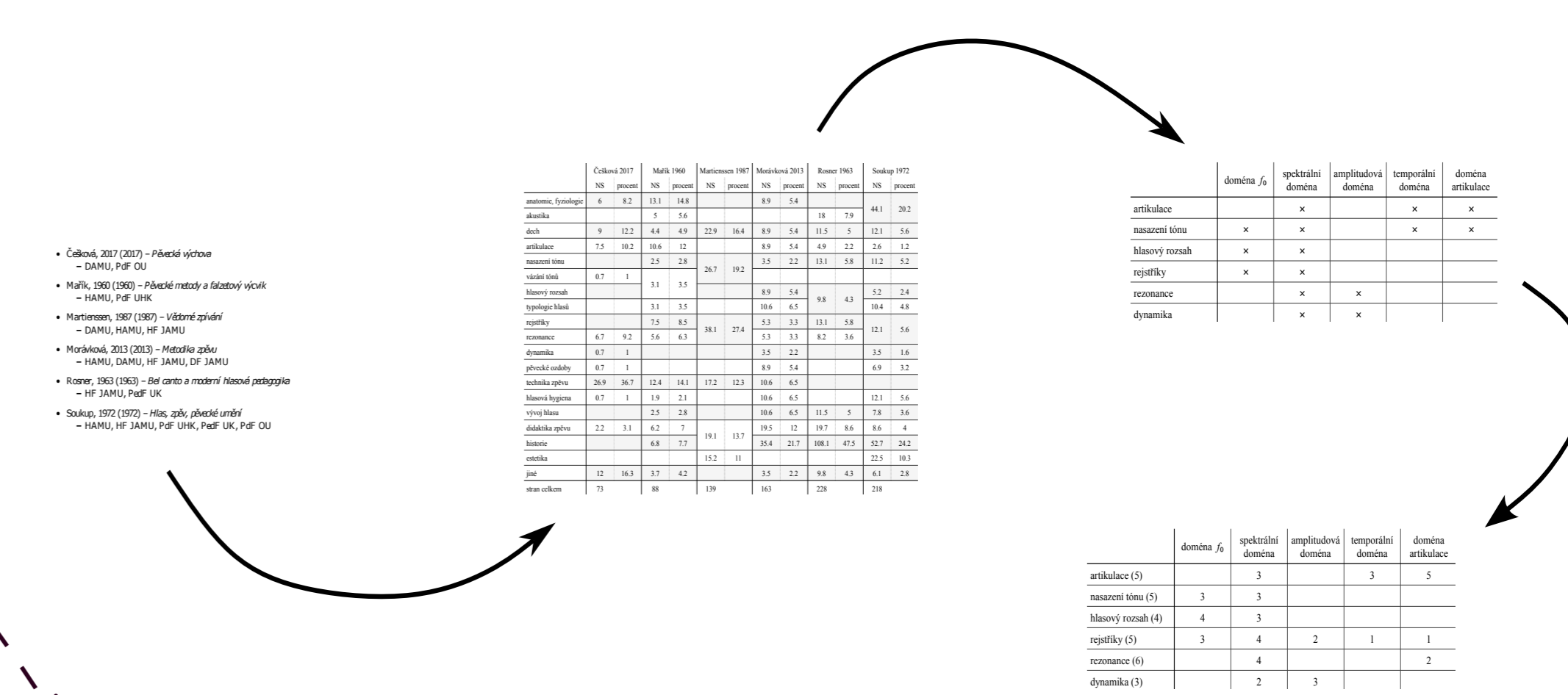
prevalent mentions of spectral domain

generally good phonetic knowledge (some outliers)

	f_0	spectrum	amplitude	temporal characteristics	articulation
articulation (5)		3		3	5
voice initiation (5)	3	3			
vocal range (4)	4	3			
voice registers (5)	3	4	2	1	1
resonance (6)		4			2
dynamics (3)		2	3		

method

- 6 publications in each field chosen from university curricula
- set of main recurring topics established within each field
- contents of each manual sorted into categories (by topic)
- categories assessed as to their phonetic grounding
- found mentions of domains compared with expectations



acoustic-phonetic operational domains

- fundamental frequency (f_0)
- spectrum – sound spectrum, spectral slope, formants
- amplitude – sound pressure level, vocal effort
- temporal characteristics – phone length/duration, speech rate, rhythm
- articulation – voicing, place/manner of articulation, formants

"resonance" turned out to have many meanings:

- generally "sounding good"
- singer's/actor's formant
- properties connected to loudness
- properties connected to timbre
- other idiosyncratic meaning

public speaking courses



main focus: elocution & orthoepy

varying degrees of phonetic knowledge

sometimes prosody mentioned only as "voice modulation"

	f_0	spectrum	amplitude	temporal characteristics	articulation
enunciation (5)				1	5
intonation (4)	4	1	1		
rhythm, tempo (5)	1		1	5	
resonance (4)	1	2	2		
loudness (2)	2		2		2

table legend

categories	f_0	spectrum	amplitude	temporal characteristics	articulation
elocution (5)				1	5
intonation (4)	4	1	1		
rhythm, tempo (5)	1		1	5	
resonance (4)	1	2	2		
loudness (2)	2		2		2

← phonetic operational domains

○ = predicted reference to phonetic domain

number of publications referring to domain in chosen category

number of publications containing category

stage speech courses



noticeable overlap with one domain in each category

main focus of publications variable: enunciation, orthoepy / resonance & rhythm / general acting skills

	f_0	spectrum	amplitude	temporal characteristics	articulation
enunciation (5)		2	1	1	5
intonation, pitch (4)	4				
rhythm, tempo (6)				6	1
resonance (5)	1	5	3		1
loudness (5)	1	2	5		2
timbre (2)		2			

general observations:

public speaking manuals are often intended for general public, but singing and stage speech manuals expect singing/acting background knowledge

most publications refer to phonetic literature, but terminological discrepancies can be found across and within fields

References

- [1] Welch, G. F., & Preti, C. (2018). Singing as Inter- and Intra-personal Communication. In G. F. Welch, D. M. Howard, & J. Nix (Ed.), The Oxford Handbook of Singing (pp. 369–392). Oxford University Press.
- [2] Kučera, M., & Frič, M. (2019). Vokologie I: Funkční diagnostika a léčba hlasových poruch. Akademie múzických umění v Praze.

