

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

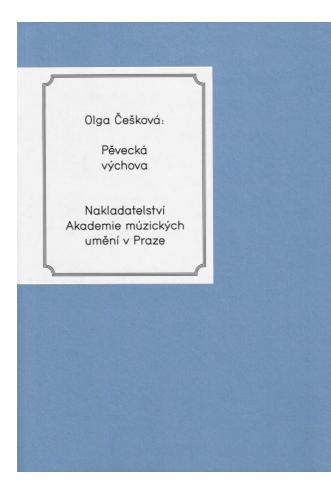
presumptions

- 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 theses presented in vocal pedagogy

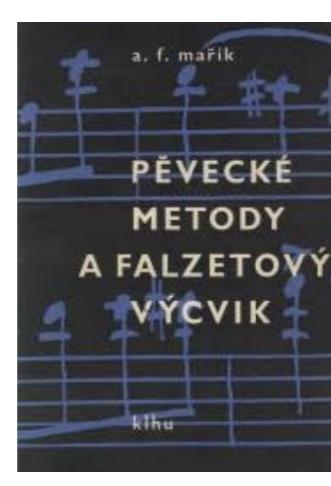
singing courses



Češková (2017)



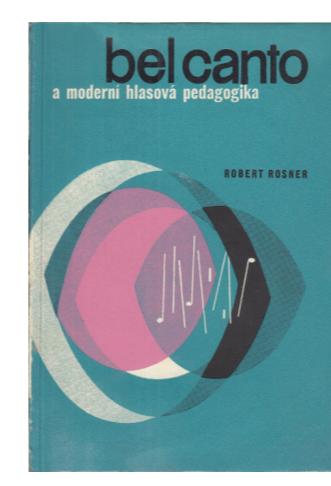
Martenssen (1987)



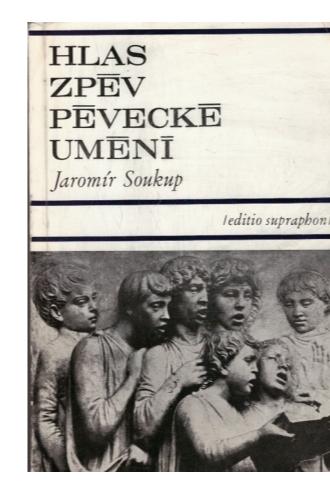
Mařík (1960)



Morávková (2013)



Rosner (1963)



Soukup (1972)

**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		

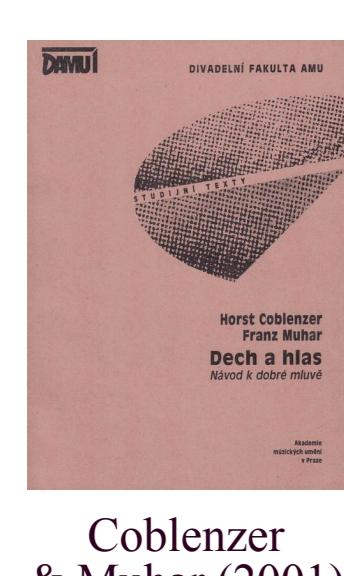
table legend

categories	number of publications referring to domain in chosen category				
	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

= predicted reference to phonetic domain

number of publications containing category

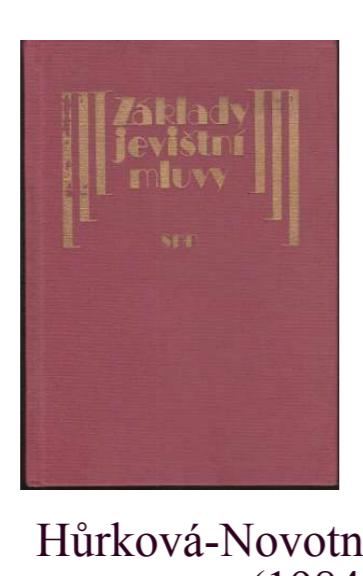
stage speech courses



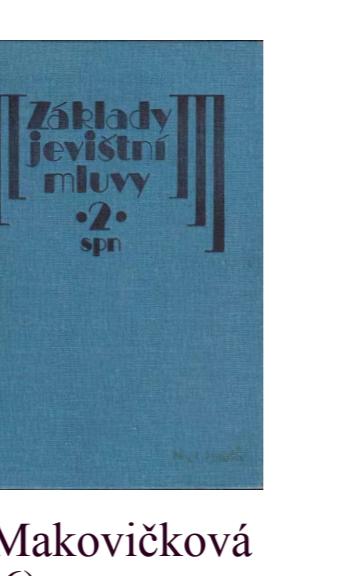
Coblenzer & Muhar (2001)



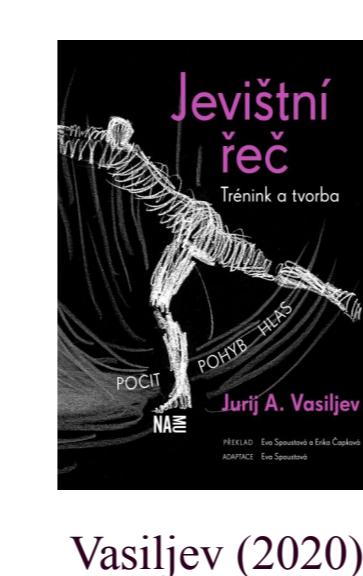
Hála (1958)



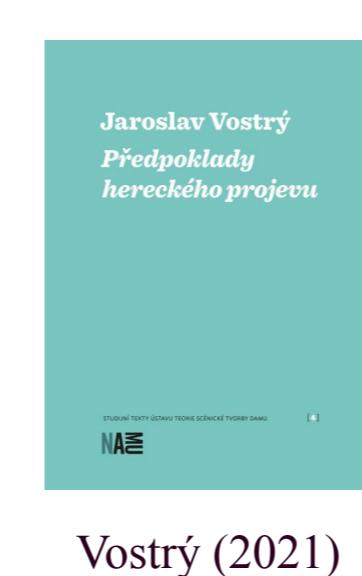
Hůrková-Novotná & Makovičková (1984, 1986)



Lukavský (2000)



Vasiljev (2020)



Vostrý (2021)

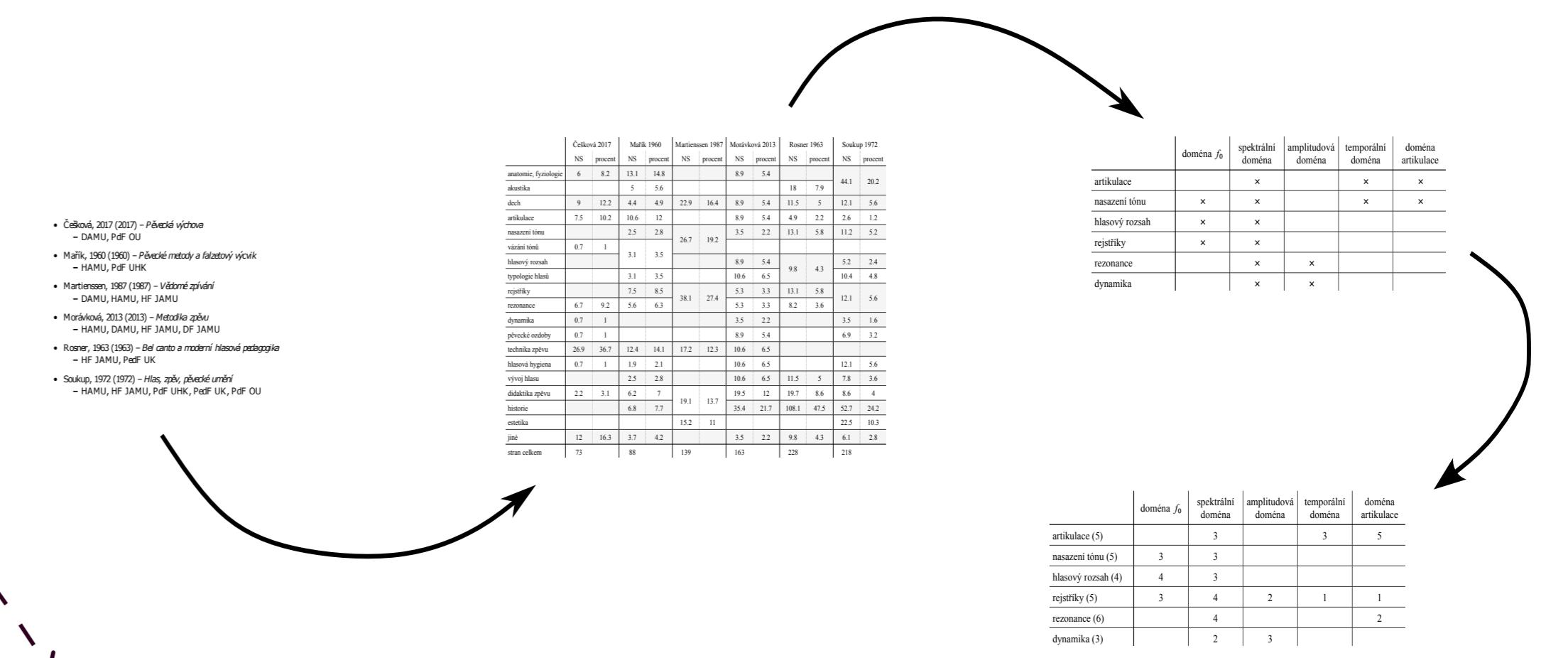
**noticeable overlap
with one domain
in each category**

**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		

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



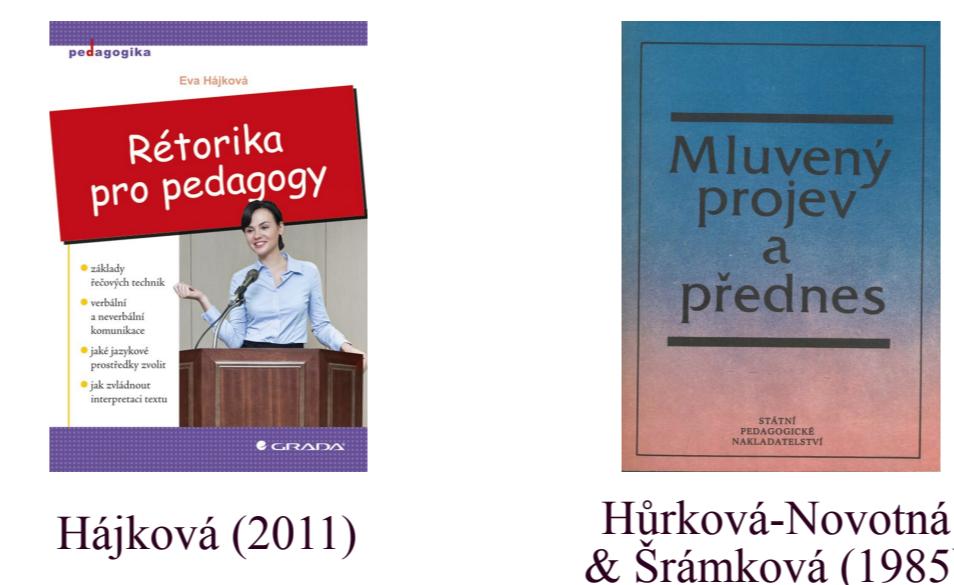
acoustic-phonetic operational domains

- 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

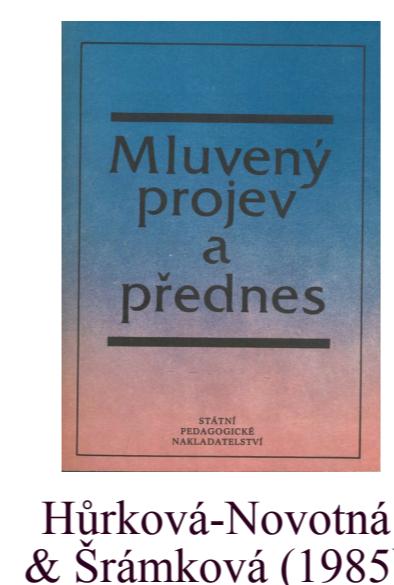
"resonance" turned out to have many meanings:

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

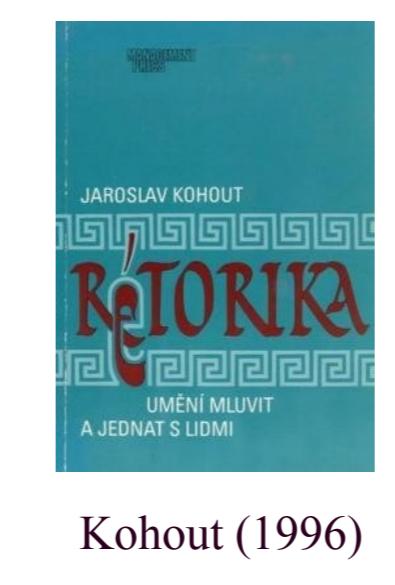
public speaking courses



Hájková (2011)



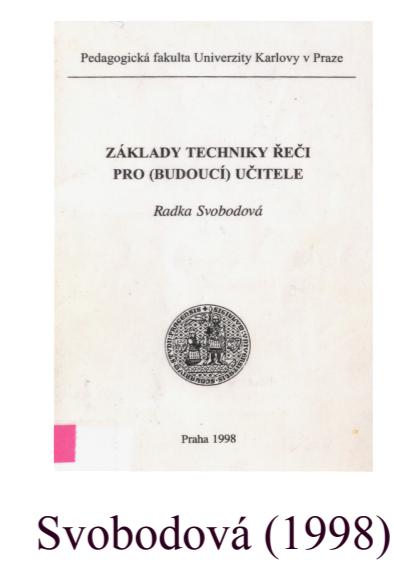
Hůrková-Novotná & Šrámková (1985)



Kohout (1996)



Mařík (2002)



Svobodová (1998)



Špačková (2015)

**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
intonation (4)	4		1	1	
rhythm, tempo (5)	1			1	5
resonance (4)	1		2	2	
loudness (2)	2			2	2

general observances:

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 muzických umění v Praze.

