

# Information about Hungarian speech

## 1. A comparison between Hungarian and English phonology

Aspect	Language	Number	Details	Source
Syllable-initial consonants	Hungarian	25 consonants	/p, b, t, d, (c), (ɟ), k, g, m, (m̃), n, (ñ), ɲ, r, f, v, s, z, ʃ, ʒ, (ç), (j), (x), (ɣ), (h), j, l, ts, ɟʒ*, tʃ, ɟʒ, cç, ʃj, (ɣ)/	Zajdó (2007)
	English	24 consonants	/p, b, t, d, k, g, m, n, ŋ, θ, ð, f, v, s, z, ʃ, ʒ, h, tʃ, ɟʒ, j, w, ɹ, l/	Smit (2004)
Consonant clusters	Hungarian	Many consonant clusters	At least 55 syllable-initial and 169 syllable-final consonant clusters	Zajdó (2007)
	English	Approx. 29 syllable-initial and many syllable-final consonant clusters	Many 2 and 3 element consonant clusters in initial position including /pl, bl, kl, gl, fl, sl, pɹ, bɹ, tɹ, dɹ, kɹ, gɹ, θɹ, fɹ, ʃɹ, pj, tj, tʃ, mj, nj, sm, sn, sp, st, sk, spl, spɹ, stɹ, skw/ and many 2 to 4 element consonant clusters in final position	McLeod (2007) Smit (2004)
Vowels and diphthongs	Hungarian	14 vowels	/i, i:, e:, y, y:, ø, ø:, ε, u, u:, o, o:, ɔ, a:/	Zajdó (2007)
	English (US-General American)	14 vowels + 3 diphthongs	Vowels: /i, ɪ, e, ε, æ, ə, ø, ɜ, u, ʊ, o, ʌ, ɔ, ɑ/ Diphthongs: /aɪ, aʊ, ɔɪ/ (Smit also lists 5 'r'-colored diphthongs)	Smit (2007)
	English (Canadian)	14 vowels + 3 diphthongs	Vowels: /i, ɪ, e, ε, æ, ə, ø, ɜ, ɛ, ʊ, o, ʌ, ɔ, ɑ/ Diphthongs: /aɪ, ʌʊ, ɔɪ/	Bernhardt, & Deby (2007)
	English (UK-Received Pronunciation)	12 vowels + 8 diphthongs	Vowels: /i, ɪ, e, æ, a, ə, ɜ, u, ʊ, ʌ, ɔ, ɒ/ Diphthongs: /aɪ, aʊ, ɔɪ, eɪ, ou, iə, eə, uə/	Howard (2007)
	English (Australian)	12 vowels + 8 diphthongs	Vowels: /i:, ɪ, e, æ, e:, ɐ, ɔ, o:, ʊ, ɯ:, ɜ:, ə/ <sup>i</sup> OR /i, ɪ, e, æ, a, ʌ, ɒ, ɔ, ʊ, u, ɜ, ə/ <sup>ii</sup> Diphthongs: /æɪ, ae, əɯ, æɔ, ɔɪ, iə, e:, uə/ <sup>i</sup> OR /eɪ, aɪ, ou, aʊ, ɔɪ, iə, eə, uə/ <sup>ii</sup>	<sup>i</sup> Harrington, Cox, & Evans, (1997) <sup>ii</sup> Mitchell (1946)
English (New Zealand)	12 vowels + 8 diphthongs	Vowels: /i, ɪ, e, æ, ə, ɜ, u, ʊ, ʌ, ɔ, ɒ, ɑ/ <sup>i</sup> OR /i, ɪ, e, æ, a, ə, ɜ, ʊ, ʌ, ɔ, ɒ/ <sup>ii</sup> Diphthongs: /aɪ, aʊ, ɔɪ, eɪ, ou, iə, eə, uə/ <sup>i</sup> OR /aɪ, aʊ, ɔɪ, eɪ, ou, iə, eə, uə/ <sup>ii</sup>	<sup>i</sup> Bauer & Warren (2004) <sup>ii</sup> Maclagan (2009)	
Tones	Hungarian	0 tones	-	
	English	0 tones	-	
Syllables	Hungarian	C <sub>(0-3)</sub> VC <sub>(0-3)</sub>		Zajdó (2007)
	English	C <sub>(0-3)</sub> VC <sub>(0-4)</sub>	The smallest syllable is V and the largest is CCCVCCCC strengths.	McLeod (2007)

<b>Stress</b>	<b>Hungarian</b>	First-syllable stress	First-syllable stress (typical)	Zajdó (2007)
	<b>English</b>	Stress-timed	Syllables can be strong or weak. Stress also is used for emphasis.	
<b>Varieties</b>	<b>Hungarian</b>	10 major dialects		Zajdó (2007)
	<b>English</b>	Many dialects	Many dialects including General American English, Received Pronunciation (England), Scottish English, Irish English, Australian English, New Zealand English, South African English etc.	
<b>Writing system</b>	<b>Hungarian</b>	Latin alphabet	42 letters with close correspondence between sounds and letters.	Zajdó (2007)
	<b>English</b>	Latin alphabet	Roman script loosely related to phonetic realizations of the consonants and vowels.	

## References

### Hungarian studies

Zajdó, K. (2007). Hungarian speech acquisition. In S. McLeod (Ed.), *The international guide to speech acquisition* (pp. 412-436). Clifton Park, NY: Thomson Delmar Learning.

### English studies

Bauer, L., & Warren, P. (2004). New Zealand English: Phonology. In E. Schneider, K. Burrige, B. Kortmann, R. Mesthrie & C. Upton (Eds.). *A handbook of varieties of English: Vol. 1. Phonology* (pp. 580-602). Berlin, Germany: Mouton de Gruyter.

Bernhardt, B. M. H., & Deby, J. (2007). Canadian English speech acquisition. In S. McLeod (Ed.), *The international guide to speech acquisition* (pp. 177-187). Clifton Park, NY: Thomson Delmar Learning.

Harrington, J., Cox, F., & Evans, Z. (1997). An acoustic phonetic study of broad, general, and cultivated Australian English vowels. *Australian Journal of Linguistics*, 17, 155-184.

Howard, S. (2007). English speech acquisition. In S. McLeod (Ed.), *The international guide to speech acquisition* (pp. 188-203). Clifton Park, NY: Thomson Delmar Learning.

Maclagan, M. (2009). Reflecting connections with the local language: New Zealand English. *International Journal of Speech-Language Pathology*, 11(2), 113-121.

McLeod, S. (2007). Australian English speech acquisition. In S. McLeod (Ed.), *The international guide to speech acquisition* (pp. 241-256). Clifton Park, NY: Thomson Delmar Learning.

Mitchell, A. G. (1946). *The pronunciation of English in Australia*. Sydney, Australia: Angus & Robertson.

Smit, A. B. (2004). *Articulation and phonology: Resource guide for school-age children and adults*. Clifton Park, NY: Thomson Delmar Learning.

Smit, A. B. (2007). General American English speech acquisition. In S. McLeod (Ed.), *The international guide to speech acquisition* (pp. 128-147). Clifton Park, NY: Thomson Delmar Learning.

## 2. Hungarian speech assessments

For a list of speech assessments in Hungarian see: [www.csu.edu.au/research/multilingual-speech/speech-assessments](http://www.csu.edu.au/research/multilingual-speech/speech-assessments)

Intelligibility in Context Scale: Hungarian [www.csu.edu.au/research/multilingual-speech/ics](http://www.csu.edu.au/research/multilingual-speech/ics)

## 3. Monolingual speech acquisition (summaries and studies written in English)

Zajdó, K. (2007). Hungarian speech acquisition. In S. McLeod (Ed.), *The international guide to speech acquisition* (pp. 412-436). Clifton Park, NY: Thomson Delmar Learning.

#### 4. Multilingual speech acquisition (summaries and studies written in English)

##### General summaries

- Goldstein, B. A., & McLeod, S. (2012). Typical and atypical multilingual speech acquisition. In S. McLeod & B. A. Goldstein (Eds.), *Multilingual aspects of speech sound disorders in children* (pp. 84-100). Bristol, UK: Multilingual Matters.
- Grech, H., & McLeod, S. (2012). Multilingual speech and language development and disorders. In D. Battle (Ed.), *Communication disorders in multicultural and international populations* (4th ed., pp. 120-147). St Louis, MO: Elsevier.
- Zhu Hua & Dodd, B. (Eds). (2006). *Phonological development and disorders in children: A multilingual perspective*. Cleavdon, UK: Multilingual Matters.
- Yavaş, M. (2007). Multilingual speech acquisition. In S. McLeod (Ed.), *The international guide to speech acquisition* (pp. 96-100). Clifton Park, NY: Thomson Delmar Learning.

##### Summaries of multilingual Hungarian speech acquisition

None known

##### Studies of multilingual Hungarian speech acquisition

Languages	Country	Study	Age of children	Total number of children (no. of multilingual children)**	Typically/atypically developing children*	Speech /language	Production/perception
Hungarian-English	USA	Bunta, F., Davidovich, I., & Ingram, D. (2006). The relationship between the phonological complexity of a bilingual child's words and those of the target languages. <i>International Journal of Bilingualism and Bilingual Education</i> , 10, 71-86.	2;0	1 (1)	typical	speech	production

Note. \* Studies of typically and atypically developing multilingual children published in English were included; however, studies that only included monolingual children were excluded.

\*\*The total number of children may have included both multilingual and monolingual children, so the number in brackets provides the total number of multilingual children.