



Multilingual Children's Speech Development



KURDISH

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Kurdish Authors

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Source: Fatemi-Syadar, S. & Zarifian, T. (forthcoming).
Kurdish speech development. In S. McLeod (Ed.). *The Oxford handbook of speech development in languages of the world*. Oxford University Press.

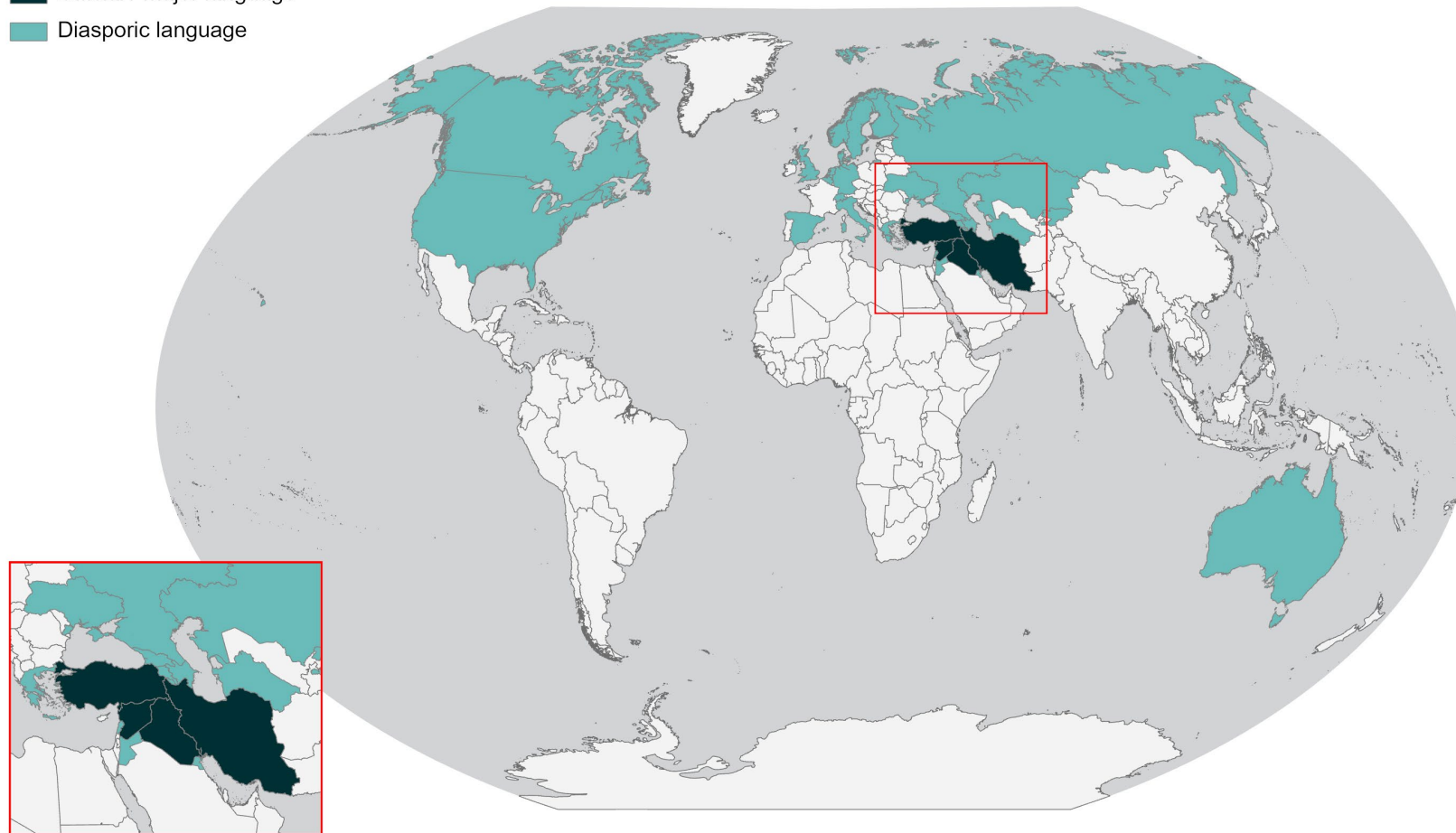
Kurdish

- **Commonly spoken in**
 - Iran, Turkey, Iraq, and Syria
- **Dialects and variants**
 - The major Kurdish Dialects (Bozarslan et al., 2021; Opengîn, 2016)
 - Northern (Kurmanji)
 - Central (Sorani or Middle Kurmanji dialect)
 - Southern (Kelhori, Khwarû, or Pehlewani)
- **Writing**
 - Twin-standard writing system
 - Arami (Arabic). Right to left (Arabic script)
 - Latin alphabet. Left to right (Roman script)
 - Example: We are so happy to speak Kurdish.

- نێمه زۆر خوشحالیین به زمانی کوردی قسه دهکهن.

Kurdish map

- Official / major language
- Diasporic language



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Kurdish Speech Components

- **Consonants (30):** /p, b, t, d, k, g, q, ʔ, m, n, ŋ, r, ɾ, f, v, s, z, ʃ, ʒ, x, ɣ, ħ, ʕ, h, w, j, l, ʎ, tʃ, dʒ/
- **Consonant clusters (many)**
 - **Initial consonant cluster:** / stop-glide, affricative-glide, fricative-glide, nasal-glide, lateral –glide//gw, kw, dw, tw, bw,pw, dʒj, dʒw, tʃj, tʃw, xw, ʒw, ʃw, zw, sw, xj, ʒj, ʃj, zj, sj, vj, nj, nw, mj, mw, rj, rw/
 - **Final consonant cluster:** /fricative-stop, affricative-stop, glide-stop, flap-stop, lateral –stop, nasal-stop, glide-affricative, flap-affricative, lateral-affricative, nasal affricative, glide-fricative, flap-fricative, lateral-fricative, nasal-fricative,approximant-nasal, glide-nasal, glide-approximant, stop-stop, fricative-fricative, stop-fricative,, stop-flap, stop- lateral, stop-nasal, fricative-flap, fricative-lateral-, fricative-nasal, nasal -approximant
- **Vowels (8+6):** /i, ɪ, ε, a, ɑ, u, ʊ, ɔ/ ej, aj, uj, ɔj, aw, aw/
- **Tones (0): None**
- **Phonotactic restrictions: $C_{(1-2)}V_{(1)}C_{(0-3)}$**
 - In Central Kurdish, a syllable structure has an obligatory vowel as its nucleus.
 - Syllable onsets can contain up to two consonants and syllable codas permit up to three consonants.
 - The permissible syllable structure is: C(C)V(C)(C)(C).
 - The initial consonant cluster includes a non-glide consonant that can be placed first (with the exception of /r, ʎ, ŋ/) and a glide is always the second member of the cluster
 - All Kurdish consonants are produced in initial, medial and final position with the exception of /ʔ/ (initial only); /h/ (initial and medial only); /r/, /ʎ/, and /ŋ/ (medial and final only).
- **Prosody:** Kurdish is a syllable-timed language (Abbas & Ahmad, 2012; Hamid, 2016; Rahimpour & Dovaise, 2011).

Kurdish Age of Acquisition

■ Consonants

- Early (before 3;6): /p, b, t, d, k, q, ʔ, f, x, ʃ, h, s, m, n, l, r, w/
- Middle (3;6-5;0): /ç, tʃ, ħ, v, j, ł, r/
- Late (after 5): /g, ʒ, z, ʁ, dʒ/

■ Consonant clusters

- Most 2- and 3-element final consonant clusters are acquired by the age of 2;0
- Most 2-element initial consonant clusters are acquired by the age of 2;1 (Fatemi-Syadar & Zarifian, 2022).

■ Vowels

- Vowels are acquired by the age of 3 years in Kurdish (Fatemi-Syadar et al., 2021)

■ Tones

- Not applicable

Kurdish Speech Development

■ Percentage correct

- Girls 91.70% consonants correct by age 3-5.
- Boys 90.75% consonants correct by age 3-5 (Fatemi-Syadar et al., 2018)

■ Intelligibility

- To date, there is no study of Kurdish-speaking children's intelligibility

■ Common phonological patterns

- Fronting, stopping, affrication, deaffrication, flapping, weak syllable deletion, medial consonant deletion, final devoicing (Fatemi-Syadar et al., 2021)

Kurdish Children with Speech Sound Disorders

■ Also called

- ئەستەنگی دەنگەکانی قسەکردن → speech sound disorder'
- ئەستەنگی دەنگ ناسی → phonological disorder'
- ئەستەنگی قسەکردن → articulation disorder'
- ئاپراکسیای قسەکردن لە منداڵیدا → childhood apraxia of speech'
- نارێکی نەخۆشی / دیس ئارتیریا → dysarthria'

■ Research has focused on

- Prevalence, Assessment, interventions for children with SSD
- Childhood apraxia of speech (CAS), cleft lip and palate (CLP)

■ Studies (examples)

- The incidence of cleft lip and palate in a Kurd population (Soltani et al., 2014)
- Kurdish Speech Test: A validation study for children aged 3–5 years (Fatemi-Syadar et al., 2019)
- Learning disability and speech disorder among toddlers (Muhammed, 2019)
- Phonological acquisition in 3-to 5-year-old Kurdish-Speaking children in Iran (Fatemi-Syadar et al., 2021)
- Phonological development in Kurdish speaking child: A longitudinal case study (Fatemi-Syadar & Zarifian, 2022)

Kurdish Speech Assessments

- **Kurdish Speech Test: KST**
تاقیکاری قسه کردنی کوردی
(Fatemi-Syadar et al., 2019)

Kurdish Speech Interventions

- To date there have not been any speech interventions or new methods that have been developed or adapted specifically for Kurdish-speaking children

Reference

Book chapter

- Fatemi-Syadar, S. & Zarifian, T. (forthcoming). Kurdish speech development. In S. McLeod (Ed.). *The Oxford handbook of speech development in languages of the world*. Oxford University Press.

Presentation

- Fatemi-Syadar, S. & Zarifian, T. (2023). Kurdish. *Multilingual children's speech development*. Charles Sturt University, Australia.

<https://www.csu.edu.au/research/multilingual-speech/languages>

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