



# Multilingual Children's Speech Development



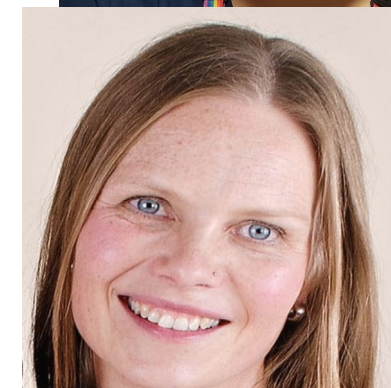
# **ITALIAN**

## **Multilingual Children's Speech Development**

**Presented by: Sara Lavaggi**

# Italian Authors

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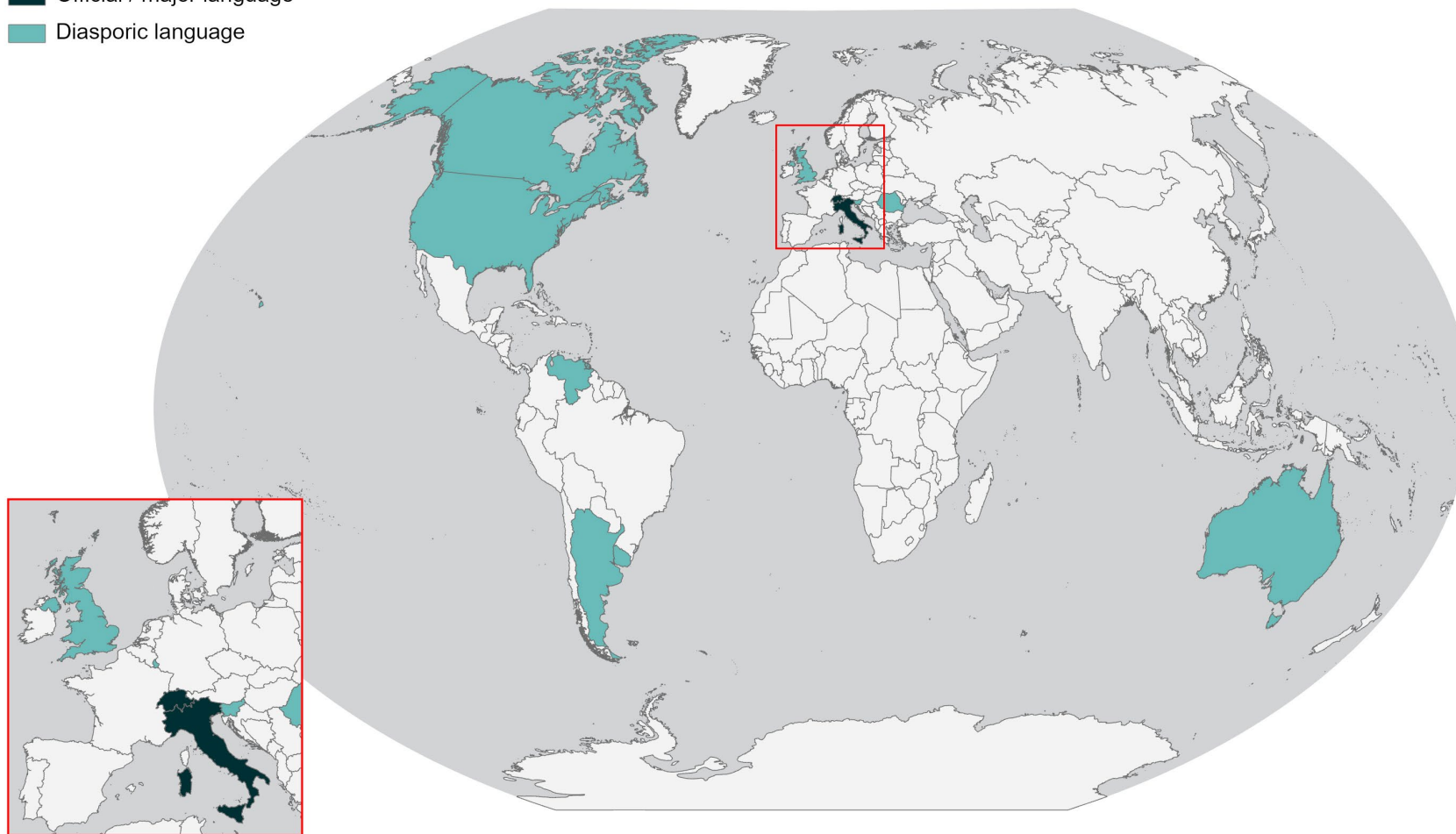
Source: Lavaggi, S., Fox-Boyer, A., & Fricke, S. (forthcoming). Italian speech development. In S. McLeod (Ed.). *The Oxford handbook of speech development in languages of the world*. Oxford University Press.

# Italian

- **Commonly spoken in**
  - Italy
- **Dialects and variants**
  - Dialects and regional variations broadly reflect the 20 regions of Italy, although a finer distinction could be made for each city.
- **Writing**
  - Left to right. Latin alphabet (Roman script).

# Italian map

- Official / major language
- Diasporic language



# Italian

## Speech Components

- **Consonants (23):** /p, b, t, d, k, g, f, v, s, z, ʃ, ʒ, ts, tʃ, dʒ, l, j, w, ʎ, r, n, m, ŋ/ + /h, ʒ/ in some dialects
- **Consonant clusters (many):**  
Tautosyllabic: /s, z/ + plosive, plosive + /r, l/, fricative/plosive/liquid + semiconsonant, fricative/plosive/nasal + liquid + semiconsonant, /s, z/ + plosive + liquid/glide.  
Heterosyllabic: nasal or liquid + C (within phonotactic restrictions).
- **Vowels (7):** /i, e, ε, ɔ, o, u, a/ + Diphthongs /e, ε, a/ with either /i/ or /u/, and /ɔ, o, u/ with /i/.
- **Tones (0):** None
- **Phonotactic restrictions:**  $C_{(0-3)}V_{(1-2)}C_{(0-1)}$
- **Prosody:** Italian is a syllable-timed language with variable stress

# Italian

## Age of Acquisition

### ■ Consonants

- By 3;0: /p, b, t, m, n, w, k, d, l, j, s, f, v/
- By 5;0: /g, r, ɲ, tʃ, dʒ, ʃ, ts, dʒ/
- Over 5;0: /ʎ/

### ■ Consonant clusters

- Few by 3;0, e.g., /pj, kj, gw/ (Tresoldi et al., 2015)
- Most between 3;0-5;0, e.g., /pl, kl/ (Tresoldi et al., 2018)
- Some above 6;0, e.g., /spr/ (Tresoldi et al., 2018)

### ■ Vowels

- By 2;6 (Lavaggi, 2023)

### ■ Tones

- Not applicable

# Italian Speech Development

## ■ Percentage correct (Lavaggi, 2023)

- 1;6-1;11: 45.22%
- 2;0-2;5: 56.60%
- 2;6-3;0: 68.22%
- 3;0-3;5: 75.24%
- 3;6-3;11: 76.88%
- 4;0-4;5: 84.86%
- 4;6-4;11: 87.27%

## ■ Intelligibility (Piazzalunga et al., 2020)

- ICS-I\*: mothers and fathers independently reported children to have high intelligibility across listeners at 3;0 years, and their mean intelligibility score improved with increasing age.

## ■ Common phonological patterns

- Fronting of velars, weak syllable deletion, stopping, assimilation, deaffrication, devoicing, cluster reduction, heterosyllabic cluster to geminate, fronting of postalveolar, gliding of /ʎ/, lateralisation of /r/.

\*ICS, Intelligibility in Context Scale (McLeod et al., 2012)

# Italian Children with Speech Sound Disorders

## ■ Also called

- Disturbo fonetico-fonologico: 'speech sound disorder', 'phonetic-phonological disorder'
- Disturbo dell'Articolazione: 'articulation disorder'
- Disprassia Verbale Evolutiva: 'childhood apraxia of speech'
- Disartria: 'dysarthria'

## ■ Research has focused on

- Presentation/description of patterns
- Phonological disorder, Childhood apraxia of speech (CAS)

## ■ Studies (examples)

- Bortolini and Leonard (1991): 9 phonologically disordered children compared to 9 typically-developing
- Chilosi et al. (2015): assessment of 32 children with CAS

# Italian Speech Assessments

- **Test di Valutazione dell'Articolazione** [Test of Assessment of Articulation] (Fanzago & Balasso, 2021)
- **Esame Fonetico di Prima Consultazione** [Phonetic Exam of First Consultation] (Schindler, 1986)
- **Prove di valutazione Fonologica del Linguaggio Infantile - PFLI** [Phonological Assessment Tasks of Infant Language] (Bortolini, 1995)
- **Test di Articolazione** [Articulation Test] (Rossi et al., 1999)
- **Batteria per la valutazione del linguaggio in bambini dai 4 ai 12 anni (BVL\_4-12) – Subtest Articolazione e Denominazione** [Battery of assessment of language in children from 4 to 12 years – Subtest Articulation and Naming] (Marini et al., 2015)
- **FON-FUN Fonologia in Gioco** [FON-FUN Phonology in Play] (Degaspero, 2018)
- **Test Fonetico per la Prima Infanzia – TFPI** [Phonetic Test for the First Infancy] (Zmarich et al., unpublished)

# Italian Speech Interventions

- **Le Coppie Minime** [Minimal Pairs] (Santoro & Panero, 2011)
- **Le Coppie Minime 2: Attività di riabilitazione articolatoria e percettiva dei gruppi consonantici** [Minimal Pairs 2: Activities of articulatory and perception rehabilitation of consonant clusters] (Santoro & Panero, 2013)
- **PROMPT (Prompts for Restructuring Oral Muscular Phonetic Targets)** (Fiori et al., 2021)
- **Rapid Syllable Transition (ReST)** for children with CAS (Scarcella et al., 2021)
- **Auditory Verbal Therapy** (Kaipa & Danser, 2016)
- **Metodo Drězañcic (1976)** [Drězañcic Method] (Drězañcic, 1976)

# Reference

## Book chapter

- Lavaggi, S., Fox-Boyer, A., & Fricke, S. (forthcoming). Italian speech development. In S. McLeod (Ed.). *The Oxford handbook of speech development in languages of the world*. Oxford University Press.

## Presentation

- Lavaggi, S., Fox-Boyer, A., & Fricke, S. (2023). *Italian: Multilingual children's speech development*. Charles Sturt University, Australia.  
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  - Sharynne McLeod, Charles Sturt University, Australia
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