



# Multilingual Children's Speech Development



# **MALTESE**

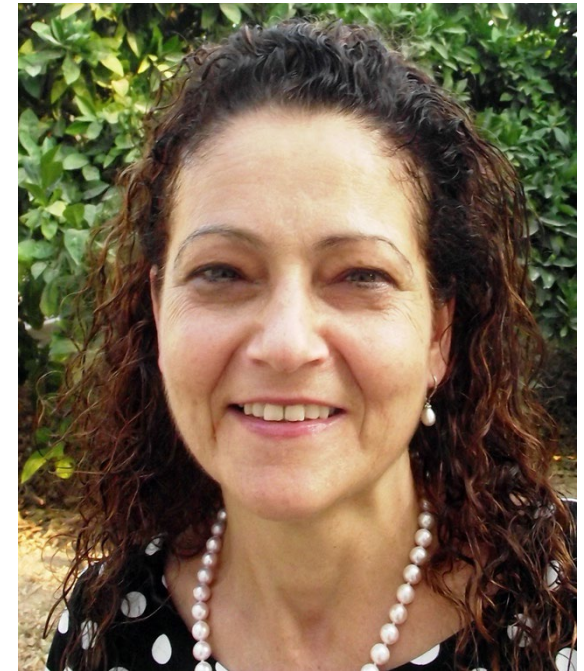
## **Multilingual Children's Speech Development**

**Presented by: Helen Grech, University of Malta**



# Maltese Author

- **Helen GRECH**, University of Malta [helen.grech@um.edu.mt](mailto:helen.grech@um.edu.mt)



Source: Grech, H. (2025). Maltese. In S. McLeod (Ed.). *The Oxford handbook of speech development in languages of the world*. Oxford University Press.

# Maltese

- **Commonly spoken in**

- Malta
- to a lesser extent by Maltese migrants in the UK, US, Canada and Australia

- **Dialects and variants**

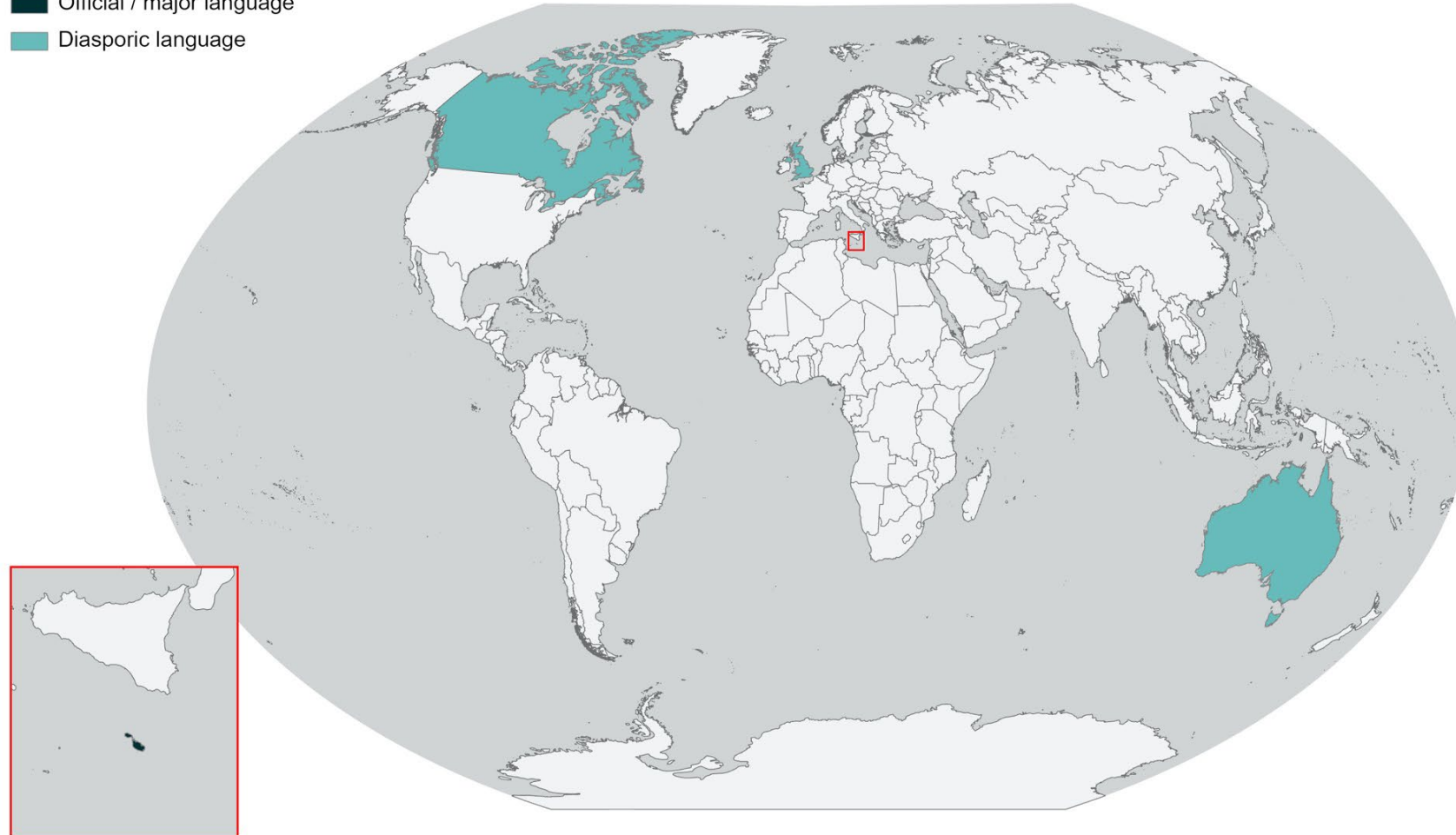
- few dialects/variants & mainly used by older generations and phasing out

- **Writing**

- Left to right. Latin alphabet (Roman script)
- The only Semitic language written this way

# Maltese Map

- Official / major language
- Diasporic language



The author acknowledges assistance provided by the Spatial Data Analysis Network (SPAN) at Charles Sturt University, and in particular Craig Poynter, for his work creating this map. Figures/maps/imagery created using ESRI ArcGIS Pro 3.1 software and data contained within ESRI's Living Atlas.

# Maltese

## Speech Components

- **Consonants (22):** /p, b, t, d, k, g, ʔ, m, n, f, v, s, z, ʃ, h, j, w, l, r, tʃ, dʒ, ts/
  - 7 plosives, 2 nasals, 6 fricatives, 4 approximants and 3 affricates
  - Plosives, fricatives, and affricates frequently occur as voiced/voiceless
- **Consonant clusters:** Word initial up to 3; word final up to 2 (generally). Clusters allowed word medially with C2 being offset of the following syllable
- **Vowels (11+7):** 11 monophthongs (5 short; 6 long) & 7 diphthongs
- **Tones (0):** None
- **Phonotactic restrictions:** C<sub>3</sub> V C<sub>2</sub>. Words are often multisyllabic and do not include more than 5 syllables
- **Prosody:** Primary correlate of stress is vowel length; stress is generally on penultimate syllable. The stressed syllable is often louder and with higher pitch. Stress distinguishes between words. Intonation pattern is constructed over a whole or part of an utterance. 2 pitch levels – high and low

# Maltese

## Age of Acquisition

### ■ Consonants

- By 3;6 years Maltese children use all the phones of Maltese except for /ts/ and master the contrastive phonemes of Maltese; few phonemes still show up with substitution including /n, d, s, z, ʃ, l, r, ts, tʃ, dʒ/

### ■ Consonant clusters

- From 3;0 years onwards Maltese children produce consonantal clusters of some type
- By 3;6 years of age the singleton segments in their phonetic inventory are produced in combination with other consonantal phones, as clusters

### ■ Vowels

- 3;0-6;0: monophthongs and diphthongs are produced by most children.

### ■ Tones

- Not applicable

# Maltese Speech Development

- **Percentage correct**
  - This increases with the age of children; by 3;6 high level of accuracy is produced
- **Intelligibility**
  - No data
- **Common phonological patterns**
  - Weak syllable deletion, fronting, stopping, lateralization of /r/, deaffrication, gemination of consonantal sequence, compensatory vowel lengthening and cluster reduction (only one observed at 4;0 years)

# Maltese Children with Speech Sound Disorders

## ■ Also called

- diffikulta' bid-diskors → speech sound disorder
- aprassja tad-diskors fit-tfal → childhood apraxia of speech
- diżartrija → dysarthria

## ■ Research has focused on

- identification of typically developing patterns; speech assessment
- children with hearing impairment (CI users)
- speech sound disorders and phonological awareness skills; automatic speech recognition

## ■ Studies (examples)

- Automatic speech recognition in the assessment of child speech (Buttigieg, Grech, Attard, Fabri, & Farrugia, 2021)
- Phonological development of consonants in 4 year old Maltese children (Azzopardi, 1997).
- Speech sound disorders and phonological awareness skills in Maltese children aged 4 to 6 years. (Camilleri, 2019)
- Articulation and phonology of Maltese cochlear implanted children. (Felice, 2019)
- Development of a speech and language screening tool for 3-year-old Maltese children (Formosa, 2019)
- Bilingual speech assessment for Maltese children (Grech, 2017)

# Maltese Speech Assessments

- Grech, H., Dodd, B., & Franklin, S. (2011). *Maltese-English Speech Assessment (MESA)*. Malta: University of Malta. (ISBN: 978-99957-0-027-0)
- Formosa, R. (2019). *The development of a speech and language screening tool for 3-year-old Maltese children*. Unpublished Master dissertation. University of Malta.

# Maltese Speech Interventions

- No specific speech interventions that are available for Maltese-speaking children
- Clinicians adapt available scientifically-based interventions to the child's needs and the respective phonological system/s

# Reference

## Book chapter

- Grech, H. (2025). Maltese speech development. In S. McLeod (Ed.). *The Oxford handbook of speech development in languages of the world*. Oxford University Press.

## Presentation

- Grech, H. (2024). *Maltese: Multilingual children's speech development*. Charles Sturt University, Australia. <https://www.csu.edu.au/research/multilingual-speech/languages>
  - Sharynne McLeod and Helen L. Blake, Charles Sturt University, Australia