

## Paper 112 Supplementary Materials

### Model Specification

Fixed effects: native language (Arabic, English, Maltese), grammar type (concatenative, non-concatenative)

Random effects: subjects, items

accuracy ~ nativeLanguage + grammarType + (1|subject) + (1|item)

The interaction between nativeLanguage and grammarType in the maximal model was not significant.

To assess grammarType's contribution to the model, the following model was used and compared to the main model above using the anova() function.

accuracy ~ nativeLanguage + (1|subject) + (1|item)

**Table 5:** Percentage of error type in participant responses in non-concatenative grammar from native Arabic speakers. Percentage of correct responses: 0.42%.

Error Type	% Responses
changed vowels only	46.85%
Englishlike plural	13.15%
correct syllable structure only	4.34%
truncated version of singular	4.20%
initial consonant cluster overregularization	4.20%
syllable structure overregularization	3.78%
added alternate affix	3.22%
changed consonants & vowels	3.08%
Arabiclike concatenative plural	1.40%
other variations ( < 1% of responses per possibility)	16.79%

**Table 6:** Percentage of error type in participant responses in non-concatenative grammar from native Maltese speakers. Percentage of correct responses: 1.58%.

Error Type	% Responses
Malteselike concatenative plural	20.75%
initial consonant cluster overregularization	15.49%
changed vowels only	15.34%
correct syllable structure only	11.43%
truncated version of singular	5.64%
syllable structure overregularization	9.70%
added alternate affix	4.44%
consonant reduplication overregularization	3.53%
Malteselike non-concatenative plural	1.80%
other variations ( < 1% of responses per possibility)	10.31%

possibility)

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**Table 7:** Percentage of error type in participant responses in non-concatenative grammar from native English speakers. Percentage of correct responses: 5.51%.

Error Type	% Responses
changed vowels only	34.49%
syllable structure overregularization	12.04%
correct syllable structure only	9.86%
truncated version of singular	9.32%
added alternate affix	8.03%
Englishlike plural	5.78%
changed consonants & vowels	1.97%
consonant reduplication overregularization	1.02%
other variations ( < 1% of responses per possibility)	9.11%