

The Productivity of Variable Disyllabic Tone Sandhi in Tianjin Chinese

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Appendix 2: ANOVA Results for Word Type Comparisons

Repeated-Measures ANOVA results for the effects of Word-Type and Data-Point for the six sandhis are given in (a)-(f), respectively. Word types that are significantly different from each other ($p < .05$) in either pitch means (Word-Type main effect) or pitch shapes (Word-Type \times Data-Point interaction) are indicated by shading in the tables.

(a) L+L \rightarrow LH+L (T1+T1 \rightarrow T3+T1):

	Word-Type	Data-Point	Word-Type \times Data-Point
REAL vs. PSEUDO	F(1.000, 47.000) = 13.121, $p = .001$	F(1.452, 68.249) = 33.083, $p < .001$	F(2.083, 97.924) = 1.873, $p = .157$
REAL vs. NOVEL	F(1.000, 47.000) = 20.081, $p < .001$	F(1.484, 69.768) = 30.324, $p < .001$	F(1.499, 70.453) = 4.638, $p = .021$
PSEUDO vs. NOVEL	F(1.000, 47.000) = 6.503, $p = .014$	F(1.473, 69.237) = 24.807, $p < .001$	F(1.698, 79.803) = 2.407, $p = .127$

(b) LH+LH \rightarrow H+LH (T3+T3 \rightarrow T2+T3):

	Word-Type	Data-Point	Word-Type \times Data-Point
REAL vs. PSEUDO	F(1.000, 47.000) = 14.170, $p < .001$	F(1.994, 93.714) = 172.685, $p < .001$	F(2.777, 130.511) = 12.774, $p < .001$
REAL vs. NOVEL	F(1.000, 47.000) = 21.054, $p < .001$	F(2.183, 102.586) = 198.298, $p < .001$	F(2.546, 119.651) = .379, $p = .735$
PSEUDO vs. NOVEL	F(1.000, 47.000) = 2.621, $p = .112$	F(2.241, 105.331) = 144.096, $p < .001$	F(2.718, 127.759) = 7.789, $p < .001$

(c) HL+L \rightarrow H+L (T4+T1 \rightarrow T2+T1):

	Word-Type	Data-Point	Word-Type × Data-Point
REAL vs. PSEUDO	F(1.000, 47.000) = 3.287, p=.076	F(1.391, 65.399) = 6.922, p=.005	F(2.783, 130.780) = 1.413, p=.244
REAL vs. NOVEL	F(1.000, 47.000) = 53.189, p<.001	F(1.373, 64.521) = 3.456, p=.054	F(1.879, 88.334) = 10.050, p<.001
PSEUDO vs. NOVEL	F(1.000, 47.000) = 70.319, p<.001	F(1.397, 65.645) = 2.473, p=.109	F(2.254, 105.957) = 9.988, p<.001

(d) HL+HL → L+HL (T4+T4 → T1+T4):

	Word-Type	Data-Point	Word-Type × Data-Point
REAL vs. PSEUDO	F(1.000, 47.000) = 30.273, p<.001	F(1.745, 81.997) = 497.845, p<.001	F(2.246, 105.582) = 8.084, p<.001
REAL vs. NOVEL	F(1.000, 47.000) = 43.938, p<.001	F(2.049, 96.296) = 481.418, p<.001	F(2.294, 107.796) = 15.894, p<.001
PSEUDO vs. NOVEL	F(1.000, 47.000) = 4.818, p=.033	F(1.900, 89.311) = 448.736, p<.001	F(2.701, 126.938) = 9.716, p<.001

(e) LH+H → L+H (T3+T2 → T1+T2):

	Word-Type	Data-Point	Word-Type × Data-Point
REAL vs. PSEUDO	F(1.000, 47.000) = 4.084, p=.049	F(2.268, 106.607) = 29.682, p<.001	F(2.459, 115.554) = .293, p=.791
REAL vs. NOVEL	F(1.000, 47.000) = 12.953, p=.001	F(2.198, 103.302) = 35.667, p<.001	F(2.248, 105.679) = 3.722, p=.023
PSEUDO vs. NOVEL	F(1.000, 47.000) = 7.321, p=.009	F(2.059, 96.756) = 23.749, p<.001	F(2.450, 115.161) = 2.221, p=.102

(f) LH+HL → L+HL (T3+T4 → T1+T4):

	Word-Type	Data-Point	Word-Type × Data-Point
REAL vs. PSEUDO	F(1.000, 47.000) = .016, p=.900	F(2.148, 100.946) = 23.638, p<.001	F(1.896, 89.111) = .820, p=.438
REAL vs. NOVEL	F(1.000, 46.000) = 2.261, p=.140	F(2.719, 125.097) = 23.975, p<.001	F(3.003, 138.157) = .727, p=.537
PSEUDO vs. NOVEL	F(1.000, 46.000) = 1.718, p=.197	F(2.658, 122.268) = 25.055, p<.001	F(2.297, 105.681) = .446, p=.668