PERFORMANCES AT SIMULATING SOME EFFECTS

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Simulating effects observed in human reading

New List of Benchmark Effects

Name of effect	Benchmark data set	Description	Triangle	DRC	CDP+
Frequency	Jared (2002, Experiment 2) Weekes (1997)	High-frequency words are faster/more accurate than low-frequency words.	+	+	+
Lexicality	McCann and Besner (1987) Weekes (1997)	Words are faster/more accurate than pseudowords.	+	+	+
Frequency × Regularity	Paap and Noel (1991) Jared (2002, Experiment 2)	Irregular words are slower/less accurate than regular words. Jared (2002) reported no interaction with frequency.	−	+	+
Word consistency	Jared (2002, Experiment 1)	Inconsistent words are slower/less accurate than consistent words. The size of the effect depends on the friend–enemy ratio.	+	−	+
Nonword consistency	Andrews and Scarratt (1998)	Nonword pronunciations show graded consistency effects; that is, people do not always use the most common grapheme–phoneme correspondences.	−	−	+
Length × Lexicality	Weekes (1997) Ziegler et al. (2001)	Nonword naming latencies increase linearly with each additional letter.	−	+	+
Position of irregularity	Rastle and Coltheart (1999)	The size of the regularity effect is bigger for words with first position irregularities (e.g., *chef*) than for words with second- or third-position irregularities.	−	+	+
Body neighborhood	Ziegler et al. (2001)	Words with many body neighbors are faster/more accurate than words with few body neighbors.	−	−	+
Masked priming	Forster and Davis (1991)	Words preceded by an onset prime are faster/more accurate than words preceded by unrelated primes.	?	+	+
Pseudohomophone advantage	McCann and Besner (1987) Reynolds and Besner (2005)	Nonwords that sound like real words (e.g., *bloo*) are faster/more accurate than orthographic controls.	+	+	+
Surface dyslexia	Patterson and Behrmann (1997)	Patient MP showed specific impairment of irregular word reading, which was modulated by the consistency ratio of the words.	+	−	+
Phonological dyslexia	Derouesné and Beauvois (1985)[a]	Patient LB showed specific impairment of nonword reading, which was reduced when nonwords were orthographically similar pseudohomophones.	+[b]	+	+
Large-scale databases	Spieler and Balota (1997) Balota and Spieler (1998)	Naming latencies of the model were regressed onto the average naming latency of each item in large-scale databases containing thousands of items.	−	−	+