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4. Implementation of Word Representation in the Potts Network4.1. Semantic Representation; 4.2. Syntactic Representation; 5. Discussion; References; Unexpected Predictability in the Hawaiian Passive; 1. Introduction; 2. Data; 3. Methods; 3.1. Pre-processing; 3.2. The model; 3.3. Error measures; 3.3.1. Mean Squared Error; 3.3.2. Classification Error; 3.4. Baseline estimates; 3.4.1. Random guess: adaptation to the range of target values; 3.4.2. Weighted guess: adaptation to the distribution of target values; 4. Results; 5. Conclusion; Acknowledgements; References

Difference Between Spoken and Written Language Based on Zipf 's Law Analysis1. Introduction; 2. Methods; 3. Results; 3.1. Log- log frequency vs. rank plots; 3.2. Five most frequent words in 1-, 2-, and 3-grams; 3.3. Exponent of rank; 4. Discussion; Acknowledgments; References; Reading Aloud is Quicker than Reading Silently: A Study in the Japanese Language Demonstrating the Enhancement of Cognitive Processing by Action; 1. Introduction; 2. Material and Methods; 3. Results; 4. Discussion; References; Development; Testing a Dynamic Neural Field Model of Children's Category Labelling

1. Introduction2. Simulation; 2.1. Dynamic Neural Fields; 2.2. Categorisation by Shared Features; 2.3. Method; 2.3.1. Architecture; 2.3.2. Stimuli; 2.3.3. Design and Procedure; 2.3.4. Results and Discussion; 3. Experiment; 3.1. Method; 3.1.1. Participants; 3.1.2. Stimuli; 3.1.3. Procedure and Design; 3.2. Results and Discussion; 4. General Discussion; References; Theoretical and Computational Limitations in Simulating 3- to4-Month-Old Infants' Categorization Processes; 1. Introduction; 2. Simulation 1. Reproduction of the asymmetric categorization effect; 2.1. Stimuli 2.2. Neural network procedure

Sommario/riassunto

Computational Models of Cognitive Processes collects refereed versions of papers presented at the 13th Neural Computation and Psychology Workshop (NCPW13) that took place July 2012, in San Sebastian (Spain). This workshop series is a well-established and unique forum that brings together researchers from such diverse disciplines as artificial intelligence, cognitive science, computer science, neurobiology, philosophy and psychology to discuss their latest work on models of cognitive processes.
