James L Mcclelland

List of Publications by Year in Descending Order

136 papers	44,364 citations	61 h-index	161 g-index
161 ext. papers	49,732 ext. citations	5.4 avg, IF	7.53 L-index

#	Paper	IF	Citations
136	Do estimates of numerosity really adhere to Weber's law? A reexamination of two case studies. *Psychonomic Bulletin and Review*, **2021**, 28, 158-168	4.1	4
135	Transforming task representations to perform novel tasks. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 32970-32981	11.5	1
134	Intrusions into the shadow of attention: A new take on illusory conjunctions. *Attention, Perception, and Psychophysics*, **2020**, 82, 564-584	2	2
133	Exemplar models are useful and deep neural networks overcome their limitations: A commentary on Ambridge (2020). *First Language*, **2020**, 40, 612-615	1.5	2
132	Numerosity discrimination in deep neural networks: Initial competence, developmental refinement and experience statistics. *Developmental Science*, **2020**, 23, e12940	4.5	12
131	Value-based decision making: An interactive activation perspective. *Psychological Review*, **2020**, 127, 153-185	6.3	13
130	Quasi-compositional mapping from form to meaning: a neural network-based approach to capturing neural responses during human language comprehension. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2020**, 375, 20190313	5.8	11
129	Placing language in an integrated understanding system: Next steps toward human-level performance in neural language models. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 25966-25974	11.5	13
128	Integration of new information in memory: new insights from a complementary learning systems perspective. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2020**, 375, 20190637	5.8	16
127	A mathematical theory of semantic development in deep neural networks. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 11537-11546	11.5	43
126	Developing the knowledge of number digits in a child-like robot. *Nature Machine Intelligence*, **2019**, 1, 594-605	22.5	11
125	Modelling the N400 brain potential as change in a probabilistic representation of meaning. *Nature Human Behaviour*, **2018**, 2, 693-705	12.8	92
124	Bayesian statistics to test Bayes optimality. *Behavioral and Brain Sciences*, **2018**, 41, e246	0.9	
123	Different presentations of a mathematical concept can support learning in complementary ways.. *Journal of Educational Psychology*, **2018**, 110, 664-682	5.3	4
122	Concepts, control, and context: A connectionist account of normal and disordered semantic cognition. *Psychological Review*, **2018**, 125, 293-328	6.3	74
121	The dynamics of multimodal integration: The averaging diffusion model. *Psychonomic Bulletin and Review*, **2017**, 24, 1819-1843	4.1	7
120	The Unit Circle as a Grounded Conceptual Structure in Precalculus Trigonometry **2017**, 247-269		

119	Building on prior knowledge without building it in. *Behavioral and Brain Sciences*, **2017**, 40, e268	0.9	3
118	Interactive Processing Through Spreading Activation **2017**, 37-60		1
117	What Learning Systems do Intelligent Agents Need? Complementary Learning Systems Theory Updated. *Trends in Cognitive Sciences*, **2016**, 20, 512-534	14	229
116	Bayesian analysis of simulation-based models. *Journal of Mathematical Psychology*, **2016**, 72, 191-199	1.2	19
115	You shall know an object by the company it keeps: An investigation of semantic representations derived from object co-occurrence in visual scenes. *Neuropsychologia*, **2015**, 76, 52-61	3.2	33
114	Resilient properties of thought and experience. *Language, Cognition and Neuroscience*, **2015**, 30, 917-918	2.4	1
113	Payoff Information Biases a Fast Guess Process in Perceptual Decision Making under Deadline Pressure: Evidence from Behavior, Evoked Potentials, and Quantitative Model Comparison. *Journal of Neuroscience*, **2015**, 35, 10989-1011	6.6	23
112	Connectionist perspectives on language learning, representation and processing. *Wiley Interdisciplinary Reviews: Cognitive Science*, **2015**, 6, 235-47	4.5	20
111	Cognitive Neuroscience **2015**, 95-102		2
110	Interactive activation and mutual constraint satisfaction in perception and cognition. *Cognitive Science*, **2014**, 38, 1139-89	2.2	51
109	Connectionism and the Emergence of Mind **2014**,		1
108	Parallel Distributed Processing at 25: further explorations in the microstructure of cognition. *Cognitive Science*, **2014**, 38, 1024-77	2.2	59
107	Why bilateral damage is worse than unilateral damage to the brain. *Journal of Cognitive Neuroscience*, **2013**, 25, 2107-23	3.1	68
106	Incorporating rapid neocortical learning of new schema-consistent information into complementary learning systems theory. *Journal of Experimental Psychology: General*, **2013**, 142, 1190-1210	4.7	148
105	A differentiation account of recognition memory: evidence from fMRI. *Journal of Cognitive Neuroscience*, **2013**, 25, 421-35	3.1	20
104	Integrating probabilistic models of perception and interactive neural networks: a historical and tutorial review. *Frontiers in Psychology*, **2013**, 4, 503	3.4	32
103	Context, cortex, and associations: a connectionist developmental approach to verbal analogies. *Frontiers in Psychology*, **2013**, 4, 857	3.4	8
102	Two mechanisms of human contingency learning. *Psychological Science*, **2012**, 23, 59-68	7.9	21

101	Retrospective. R. Duncan Luce (1925-2012). *Science*, **2012**, 337, 1619	33.3	
100	Using Time-Varying Evidence to Test Models of Decision Dynamics: Bounded Diffusion vs. the Leaky Competing Accumulator Model. *Frontiers in Neuroscience*, **2012**, 6, 79	5.1	67
99	Generalization through the recurrent interaction of episodic memories: a model of the hippocampal system. *Psychological Review*, **2012**, 119, 573-616	6.3	190
98	Can native Japanese listeners learn to differentiate/r-l/on the basis of F3 onset frequency?. *Bilingualism*, **2012**, 15, 434-435	3.2	14
97	Can native Japanese listeners learn to differentiate /rɫ/ on the basis of F3 onset frequency?*. *Bilingualism*, **2012**, 15, 255-274	3.2	31
96	Testing multi-alternative decision models with non-stationary evidence. *Frontiers in Neuroscience*, **2011**, 5, 63	5.1	43
95	Dynamic integration of reward and stimulus information in perceptual decision-making. *PLoS ONE*, **2011**, 6, e16749	3.7	42
94	Predicting Native English-Like Performance by Native Japanese Speakers. *Journal of Phonetics*, **2011**, 39, 571-584	2.2	40
93	A PDP model of the simultaneous perception of multiple objects. *Connection Science*, **2011**, 23, 161-172	2.8	8
92	Locating object knowledge in the brain: comment on Bowers's (2009) attempt to revive the grandmother cell hypothesis. *Psychological Review*, **2010**, 117, 284-8	6.3	47
91	Integration of sensory and reward information during perceptual decision-making in lateral intraparietal cortex (LIP) of the macaque monkey. *PLoS ONE*, **2010**, 5, e9308	3.7	143
90	Letting structure emerge: connectionist and dynamical systems approaches to cognition. *Trends in Cognitive Sciences*, **2010**, 14, 348-56	14	324
89	Emergence in cognitive science. *Topics in Cognitive Science*, **2010**, 2, 751-70	2.5	48
88	Postscript: Parallel distributed processing in localist models without thresholds.. *Psychological Review*, **2010**, 117, 289-290	6.3	1
87	Are there mental lexicons? The role of semantics in lexical decision. *Brain Research*, **2010**, 1365, 66-81	3.7	37
86	Memory as a Constructive Process **2010**, 129-149		4
85	How do we get from propositions to behavior?. *Behavioral and Brain Sciences*, **2009**, 32, 226-227	0.9	
84	Modeling Unsupervised Perceptual Category Learning. *IEEE Transactions on Autonomous Mental Development*, **2009**, 1, 35-43		8

83	A connectionist model of a continuous developmental transition in the balance scale task. *Cognition* , **2009**, 110, 395-411	3.5	16
82	Is a Machine Realization of Truly Human-Like Intelligence Achievable?. *Cognitive Computation*, **2009**, 1, 17-21	4.4	16
81	The place of modeling in cognitive science. *Topics in Cognitive Science*, **2009**, 1, 11-38	2.5	136
80	A single-system account of semantic and lexical deficits in five semantic dementia patients. *Cognitive Neuropsychology*, **2008**, 25, 136-64	2.3	68
79	A simple model from a powerful framework that spans levels of analysis. *Behavioral and Brain Sciences*, **2008**, 31, 729-749	0.9	7
78	Précis of Semantic Cognition: A Parallel Distributed Processing Approach. *Behavioral and Brain Sciences*, **2008**, 31, 689-714	0.9	85
77	Effects of Attention on the Strength of Lexical Influences on Speech Perception: Behavioral Experiments and Computational Mechanisms. *Cognitive Science*, **2008**, 32, 398-417	2.2	39
76	Using domain-general principles to explain children's causal reasoning abilities. *Developmental Science*, **2007**, 10, 333-56	4.5	76
75	Success and failure of new speech category learning in adulthood: consequences of learned Hebbian attractors in topographic maps. *Cognitive, Affective and Behavioral Neuroscience*, **2007**, 7, 53-73	3.5	35
74	Gradience of Gradience: A reply to Jackendoff. *Linguistic Review*, **2007**, 24,	0.5	23
73	Extending a biologically inspired model of choice: multi-alternatives, nonlinearity and value-based multidimensional choice. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2007**, 362, 1655-70	5.8	125
72	Unsupervised learning of vowel categories from infant-directed speech. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 13273-8	11.5	130
71	Differentiating the differentiation models: A comparison of the retrieving effectively from memory model (REM) and the subjective likelihood model (SLiM). *Journal of Memory and Language*, **2006**, 55, 447-460	3.8	36
70	Are there interactive processes in speech perception?. *Trends in Cognitive Sciences*, **2006**, 10, 363-9	14	168
69	An interactive Hebbian account of lexically guided tuning of speech perception. *Psychonomic Bulletin and Review*, **2006**, 13, 958-65	4.1	56
68	Computational and behavioral investigations of lexically induced delays in phoneme recognition. *Journal of Memory and Language*, **2005**, 52, 416-435	3.8	16
67	Alternatives to the combinatorial paradigm of linguistic theory based on domain general principles of human cognition. *Linguistic Review*, **2005**, 22,	0.5	94
66	Categorization and discrimination of nonspeech sounds: differences between steady-state and rapidly-changing acoustic cues. *Journal of the Acoustical Society of America*, **2004**, 116, 1198-207	2.2	48

65	A reexamination of the evidence for the somatic marker hypothesis: what participants really know in the Iowa gambling task. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 16075-80	11.5	339
64	U-Shaped Curves in Development: A PDP Approach. *Journal of Cognition and Development*, **2004**, 5, 137-145	2.5	26
63	Loss aversion and inhibition in dynamical models of multialternative choice. *Psychological Review*, **2004**, 111, 757-69	6.3	245
62	Structure and deterioration of semantic memory: a neuropsychological and computational investigation. *Psychological Review*, **2004**, 111, 205-35	6.3	741
61	Semantic Cognition **2004**,		347
60	Developing a domain-general framework for cognition: What is the best approach?. *Behavioral and Brain Sciences*, **2003**, 26, 611-614	0.9	8
59	Deficits in phonology and past-tense morphology: What the connection?. *Journal of Memory and Language*, **2003**, 48, 502-526	3.8	108
58	The parallel distributed processing approach to semantic cognition. *Nature Reviews Neuroscience*, **2003**, 4, 310-22	13.5	418
57	Connectionist models of development. *Developmental Science*, **2003**, 6, 413-429	4.5	121
56	Differentiation and integration in human language. Reply to Marslen-Wilson and Tyler. *Trends in Cognitive Sciences*, **2003**, 7, 63-64	14	13
55	Double dissociations never license simple inferences about underlying brain organization, especially in developmental cases. *Behavioral and Brain Sciences*, **2002**, 25, 763-764	0.9	
54	Success and failure in teaching the [r]-[l] contrast to Japanese adults: tests of a Hebbian model of plasticity and stabilization in spoken language perception. *Cognitive, Affective and Behavioral Neuroscience*, **2002**, 2, 89-108	3.5	171
53	Rules or connections in past-tense inflections: what does the evidence rule out?. *Trends in Cognitive Sciences*, **2002**, 6, 465-472	14	300
52	'Words or Rules' cannot exploit the regularity in exceptions. *Trends in Cognitive Sciences*, **2002**, 6, 464-465	14	83
51	The Morton-Massaro law of information integration: implications for models of perception. *Psychological Review*, **2001**, 108, 113-48	6.3	94
50	The time course of perceptual choice: the leaky, competing accumulator model. *Psychological Review*, **2001**, 108, 550-92	6.3	1561
49	Artificial intelligence. Autonomous mental development by robots and animals. *Science*, **2001**, 291, 599-600	33.3	434
48	Connectionist Models of Cognition **2001**, 23-58		34

47	The basis of hyperspecificity in autism: a preliminary suggestion based on properties of neural nets. *Journal of Autism and Developmental Disorders*, **2000**, 30, 497-502	4.6	48
46	Stipulating versus discovering representations. *Behavioral and Brain Sciences*, **2000**, 23, 489-491	0.9	13
45	Neural models of memory. *Current Opinion in Neurobiology*, **1999**, 9, 184-8	7.6	93
44	Understanding failures of learning: Hebbian learning, competition for representational space, and some preliminary experimental data. *Progress in Brain Research*, **1999**, 121, 75-80	2.9	34
43	Familiarity breeds differentiation: a subjective-likelihood approach to the effects of experience in recognition memory. *Psychological Review*, **1998**, 105, 724-60	6.3	264
42	A PDP approach to set size effects within the Stroop task: Reply to Kanne, Balota, Spieler, and Faust (1998).. *Psychological Review*, **1998**, 105, 188-194	6.3	23
41	Rethinking infant knowledge: toward an adaptive process account of successes and failures in object permanence tasks. *Psychological Review*, **1997**, 104, 686-713	6.3	479
40	Understanding normal and impaired word reading: computational principles in quasi-regular domains. *Psychological Review*, **1996**, 103, 56-115	6.3	2164
39	Considerations arising from a complementary learning systems perspective on hippocampus and neocortex. *Hippocampus*, **1996**, 6, 654-65	3.5	178
38	Why there are complementary learning systems in the hippocampus and neocortex: insights from the successes and failures of connectionist models of learning and memory. *Psychological Review*, **1995**, 102, 419-457	6.3	3699
37	Hippocampal conjunctive encoding, storage, and recall: avoiding a trade-off. *Hippocampus*, **1994**, 4, 661-82	3.5	685
36	Category learning. Learning the general but not the specific. *Current Biology*, **1994**, 4, 357-8	6.3	2
35	Learning Continuous Probability Distributions with Symmetric Diffusion Networks. *Cognitive Science*, **1993**, 17, 463-496	2.2	23
34	A Parallel Distributed Processing Approach to Automaticity. *American Journal of Psychology*, **1992**, 105, 239	0.5	202
33	Neural Network Models and Cognitive Neuropsychology. *Psychiatric Annals*, **1992**, 22, 148-153	0.5	5
32	Learning the structure of event sequences.. *Journal of Experimental Psychology: General*, **1991**, 120, 235-253	4.7	640
31	A computational model of semantic memory impairment: Modality specificity and emergent category specificity.. *Journal of Experimental Psychology: General*, **1991**, 120, 339-357	4.7	634
30	Stochastic interactive processes and the effect of context on perception. *Cognitive Psychology*, **1991**, 23, 1-44	3.1	108

29	Graded state machines: The representation of temporal contingencies in simple recurrent networks. *Machine Learning*, **1991**, 7, 161-193	4	126
28	Graded State Machines: The Representation of Temporal Contingencies in Simple Recurrent Networks. *Machine Learning*, **1991**, 7, 161-193	4	25
27	On the control of automatic processes: a parallel distributed processing account of the Stroop effect. *Psychological Review*, **1990**, 97, 332-61	6.3	1614
26	Learning and applying contextual constraints in sentence comprehension. *Artificial Intelligence*, **1990**, 46, 217-257	3.6	262
25	Finite State Automata and Simple Recurrent Networks. *Neural Computation*, **1989**, 1, 372-381	2.9	322
24	A distributed, developmental model of word recognition and naming. *Psychological Review*, **1989**, 96, 523-68	6.3	2962
23	Constituent attachment and thematic role assignment in sentence processing: Influences of content-based expectations. *Journal of Memory and Language*, **1988**, 27, 597-632	3.8	262
22	Cognitive penetration of the mechanisms of perception: Compensation for coarticulation of lexically restored phonemes. *Journal of Memory and Language*, **1988**, 27, 143-165	3.8	244
21	An Interactive Activation Model of Context Effects in Letter Perception: Part I. An Account of Basic Findings **1988**, 580-596		7
20	Learning and Applying Contextual Constraints in Sentence Comprehension **1988**,		8
19	The Case for Interactionism in Language Processing **1987**,		22
18	Perceptual interactions in two-word displays: Familiarity and similarity effects.. *Journal of Experimental Psychology: Human Perception and Performance*, **1986**, 12, 18-35	2.6	71
17	The TRACE model of speech perception. *Cognitive Psychology*, **1986**, 18, 1-86	3.1	2063
16	Parallel Distributed Processing **1986**,		10987
15	Levels indeed! A response to Broadbent.. *Journal of Experimental Psychology: General*, **1985**, 114, 193-197	4.7	138
14	Putting Knowledge in its Place: A Scheme for Programming Parallel Processing Structures on the Fly. *Cognitive Science*, **1985**, 9, 113-146	2.2	84
13	Distributed memory and the representation of general and specific information.. *Journal of Experimental Psychology: General*, **1985**, 114, 159-188	4.7	842
12	Speech Perception as a Cognitive Process: The Interactive Activation Model. *Speech and Language: Advances in Basic Research and Practice*, **1984**, 337-374		27

11	An interactive activation model of context effects in letter perception: II. The contextual enhancement effect and some tests and extensions of the model.. *Psychological Review*, **1982**, 89, 60-94	6.3	1035
10	An interactive activation model of context effects in letter perception: I. An account of basic findings.. *Psychological Review*, **1981**, 88, 375-407	6.3	3769
9	Experimental tests of a hierarchical model of word identification. *Journal of Verbal Learning and Verbal Behavior*, **1980**, 19, 503-524		126
8	Structural factors in figure perception. *Perception & Psychophysics*, **1979**, 26, 221-229		29
7	On the time relations of mental processes: An examination of systems of processes in cascade.. *Psychological Review*, **1979**, 86, 287-330	6.3	1203
6	Perception and masking of wholes and parts.. *Journal of Experimental Psychology: Human Perception and Performance*, **1978**, 4, 210-223	2.6	58
5	Studying Individual Differences in Reading **1978**, 191-202		
4	The role of familiar units in perception of words and nonwords. *Perception & Psychophysics*, **1977**, 22, 249-261		149
3	Preliminary letter identification in the perception of words and nonwords.. *Journal of Experimental Psychology: Human Perception and Performance*, **1976**, 2, 80-91	2.6	190
2	Visual factors in word perception. *Perception & Psychophysics*, **1973**, 14, 365-370		128
1	Semantics without categorization88-119		4