ERRATA

"A COMPUTATIONAL THEORY OF VOCABULARY ACQUISITION"

in

Lucja M. Iwańska & Stuart C. Shapiro (eds.), Natural Language Processing and Knowledge Representation: Language for Knowledge and Knowledge for Language (Menlo Park, CA/Cambridge, MA: AAAI Press/MIT Press): 347–375

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Note:

Numerous errors were introduced into the published version by the copy editor's decision not to use single quotes to form the names of words, but rather to use italics. That would be fine (after all, linguists do it that way), but the copy editor was inconsistent in his use of italics for this purpose, and there was no way for me to distinguish between the use of italics for this purpose and their use for emphasis. In addition, none of the corrections for the abstract, authors' affiliations, and bibliography were made. Sigh.

PAGE	8	PARA.	LINE	ERROR	CORRECTION			
X	(abstract)		6	can	can			
X	(abstract)		7	revised	revised			
X	(abstract)		7	converges	"converges"			
X	(abstract)		7	dictionarylike	dictionary-like			
X	(abstract)		9	settles down	"settles down"			
X	(abstract)		9	steady state	"steady state"			
		771 11 1		-	•			
xix	information for Karen Ehrlich is wrong; see 1st page of this ERRATA for correct affiliation							
347		2	2	word).	word):			
348	"An Example"	2	5	The "(1)" should b	e right-justified			
349	•	1	25	brachet	brachet			
350		2	2	brachet	brachet			
350			-3	brachet	brachet			
			-					
352		2	3	unsupervised	unsupervised			
352		2	4	error-correction	"error-correction"			
352		2	5	not	not			
352		2	5	correct	"correct"			
332		2	3	correct	Correct			
353		1	-3	not	not			
353		1	-3 to -2	correct	"correct"			
357		1	-4	in common with	"in common with"			
357		1	-4	in distinction of	"in distinction of"			
		-	·					
358	"Implementation"	1	4	how	how			
359	<u>F</u>	2	2	default reasoning	"default reasoning"			
362		0	<u>-</u> 3	dress	dress			
302		O	5	aress	aress			
363		1	9	Martins Shapiro	Martins & Shapiro			
363		1	14	intrinsic	intrinsic			
365	Table 1	last colu	umn head	Inclusion	Inclusions			
				S				
365	"Other Examples"	item 2		smite	smite			
365	"Other Examples"	2	1	revision	"revision"			
365	"Smite"		0	Smite	Smite			
366		1	1	If	(should <i>not</i> begin a new para)			
366		3	1	smite	smite			
367			2	(too much space between 'slain.' & 'King')				
367			6	Reply S1:	Reply S1:			
367	(before "Dress")		-3	smite	smite			
367	"Dress"		0	Dress	Dress			
367			-2	not	not			

PAGE	§	PARA.	LINE	ERROR	CORRECTION
368			3	dress	dress
368			10	Question D2:	Question D2:
368			12	not background belief (2)	not background belief (2)
368			16	rejecting	rejecting
368			16	add	add
368			17	either	either
368			17	or	or
372	"Siskind"	2	-6	correct	"correct
				word-to-meaning mapping	word-to-meaning mapping"
373	"Future Work"		7	previously	above
373	"Algorithm for Noun Definition"		1	"N."	"N"
375	C		1	"V."	"V"
375				brachet	brachet

Bibliography Errata

Since there are so many errors in the combined Bibliography of this book (e.g., duplicate entries, as for Winston 1975 and 1985, one of which is merely a reprint of the other; incorrect alphabetical order, e.g., listing 'Mc' and 'Mac' incorrectly)—which I will not attempt to indicate here—and since the Bibliography is a combined one, for convenience I here included the complete and correct list of references for our paper.

Berwick, Robert C. (1983), "Learning Word Meanings from Examples", *Proceedings of the 8th International Joint Conference on Artificial Intelligence (IJCAI-83; Karlsruhe, West Germany)* (Los Altos, CA: William Kaufmann): 459–461.

Campbell, Alistair E. (1996), "Resolution of the Dialect Problem in Communication through Ontological Mediation", *Proceedings of the AAAI-96 Workshop on Detecting, Preventing, and Repairing Human-Machine Miscommunication (Portland, OR)*; \(\(\begin{align*}\)\(\text{http://www.cs.uwm.edu/}\(\times\)\communication (Portland, OR); \(\text{ord}\)

Campbell, Alistair E., & Shapiro, Stuart C. (1995), "Ontological Mediation: An Overview", *Proceedings of the IJCAI Workshop on Basic Ontological Issues for Knowledge Sharing (Montréal, Quebec, Canada)*.

The Compact Edition of the Oxford English Dictionary: Complete Text Reproduced Micrographically (New York: Oxford University Press, 1971).

Cravo, Maria R., & Martins, João P. (1993), "SNePSwD: A Newcomer to the SNePS Family", *Journal of Experimental and Theoretical Artificial Intelligence* 5: 135–148.

Duchan, Judith F.; Bruder, Gail A.; & Hewitt, Lynne E. (eds.) (1995), *Deixis in Narrative: A Cognitive Science Perspective* (Hillsdale, NJ: Lawrence Erlbaum Associates).

Ehrlich, Karen (1995), "Automatic Vocabulary Expansion through Narrative Context", *Technical Report 95-09* (Buffalo: SUNY Buffalo Department of Computer Science).

Ehrlich, Karen, & Rapaport, William J. (1997), "A Computational Theory of Vocabulary Expansion", *Proceedings of the 19th Annual Conference of the Cognitive Science Society (Stanford University)* (Mahwah, NJ: Lawrence Erlbaum Associates): 205–210

Elshout-Mohr, Marianne, & van Daalen-Kapteijns, Maartje M. (1987), "Cognitive Processes in Learning Word Meanings", in Margaret G. McKeown & Mary E. Curtis (eds.), *The Nature of Vocabulary Acquisition* (Hillsdale, NJ: Lawrence Erlbaum Associates): 53–71.

Fodor, Jerry, & Lepore, Ernest (1992), Holism: A Shopper's Guide (Cambridge, MA: Basil Blackwell).

Gentner, Dedre (1981), "Some Interesting Differences between Nouns and Verbs", Cognition and Brain Theory, 4: 161-178.

Gleitman, Lila (1990), "The Structural Sources of Verb Meanings", Language Acquisition 1: 1-55.

Gleitman, Lila (1994), "A Picture is Worth a Thousand Words—But That's the Problem" (talk presented at the 1st International Summer Institute in Cognitive Science, SUNY Buffalo, July 1994); abstract in *Proceedings of the 16th Annual Conference of the Cognitive Science Society* (Hillsdale, NJ: Lawrence Erlbaum Associates): 965.

Granger, Richard H. (1977), "Foul-Up: A Program that Figures Out Meanings of Words from Context", *Proceedings of the 5th International Joint Conference on Artificial Intelligence (IJCAI-77, MIT)* (Los Altos, CA: William Kaufmann): 67–68.

- Haas, Norman, & Hendrix, Gary (1983), "Learning by Being Told: Acquiring Knowledge for Information Management", in Riszard
 S. Michalski, Jaime G. Carbonell, & Tom M. Mitchell (eds.), *Machine Learning: An Artificial Intelligence Approach* (Palo Alto, CA: Tioga Press): 405–428.
- Harman, Gilbert (1974), "Meaning and Semantics", in Milton K. Munitz & Peter K. Unger (eds.), *Semantics and Philosophy* (New York: New York University Press): 1–16.
- Harman, Gilbert (1982), "Conceptual Role Semantics", Notre Dame Journal of Formal Logic 23: 242-256.
- Hastings, Peter M. (1994), "Automatic Acquisition of Word Meanings from Natural Language Contexts", Ph.D. disseration (Ann Arbor: University of Michigan Department of Computer Science and Engineering).
- Hastings, Peter M., & Lytinen, Steven L. (1994a), "The Ups and Downs of Lexical Acquisition", *Proceedings of the 12th National Conference on Artificial Intelligence (AAAI-94, Seattle)* (Menlo Park, CA: AAAI Press/MIT Press): 754–759.
- Hastings, Peter M., & Lytinen, Steven L. (1994b), "Objects, Actions, Nouns, and Verbs", *Proceedings of the 16th Annual Conference of the Cognitive Science Society* (Hillsdale, NJ: Lawrence Erlbaum Associates): 397–402.
- Higginbotham, James (1989), "Elucidations of Meaning", Linguistics and Philosophy 12: 465-517.
- Hunt, Alan, & Koplas, Geoffrey D. (1997), "Definitional Vocabulary Acquisition Using Natural Language Processing and a Dynamic Lexicon", *SNeRG Technical Note* 29 (Buffalo: SUNY Buffalo Department of Computer Science, SNePS Research Group).
- Johnson-Laird, Philip N. (1987), "The Mental Representation of the Meanings of Words", in Alvin I. Goldman (ed.), *Readings in Philosophy and Cognitive Science* (Cambridge, MA: MIT Press, 1993): 561–583.
- Kiersey, David M. (1982), "Word Learning with Hierarchy Guided Inference", *Proceedings of the National Conference on Artificial Intelligence (AAAI-82, Pittsburgh)* (Los Altos, CA: Morgan Kaufmann): 172–178.
- Malory, Sir Thomas (1470), Le Morte Darthur, ed. by R. M. Lumiansky (New York: Collier Books, 1982).
- Martins, João, & Cravo, Maria R. (1991), "How to Change Your Mind", Noûs 25: 537-551.
- Martins, João, & Shapiro, Stuart C. (1988), "A Model for Belief Revision", Artificial Intelligence 35: 25-79.
- Meinong, Alexius (1910), *Über Annahmen*, 3rd edition, based on the 2nd edition of 1910 (Leipzig: Verlag von Johann Ambrosius Barth, 1928).
- Nutter, J. Terry (1983), "Default Reasoning Using Monotonic Logic: A Modest Proposal", *Proceedings of the National Conference on Artificial Intelligence (AAAI-83; Washington, DC)* (Los Altos, CA: Morgan Kaufmann): 297–300.
- Quillian, M. Ross (1968), "Semantic Memory", in Marvin Minsky (ed.), Semantic Information Processing (Cambridge, MA: MIT Press): 227–270.
- Quillian, M. Ross (1969), "The Teachable Language Comprehender: A Simulation Program and Theory of Language", Communications of the ACM 12: 459–476.
- Rapaport, William J. (1981), "How to Make the World Fit Our Language: An Essay in Meinongian Semantics", *Grazer Philosophische Studien* 14: 1–21.
- Rapaport, William J. (1988), "Syntactic Semantics: Foundations of Computational Natural-Language Understanding", in James H. Fetzer (ed.), *Aspects of Artificial Intelligence* (Dordrecht, Holland: Kluwer Academic Publishers): 81–131; reprinted in Eric Dietrich (ed.), *Thinking Computers and Virtual Persons: Essays on the Intentionality of Machines* (San Diego: Academic Press, 1994): 225–273.
- Rapaport, William J. (1991), "Predication, Fiction, and Artificial Intelligence", Topoi 10: 79-111.
- Rapaport, William J. (1995), "Understanding Understanding: Syntactic Semantics and Computational Cognition", in James E. Tomberlin (ed.), AI, Connectionism, and Philosophical Psychology, Philosophical Perspectives, Vol. 9 (Atascadero, CA: Ridgeview): 49–88; to be reprinted in Clark, Andy, & Toribio, Josefa (1998), Language and Meaning in Cognitive Science: Cognitive Issues and Semantic Theory, Artificial Intelligence and Cognitive Science: Conceptual Issues, Vol. 4 (Hamden, CT: Garland).
- Rapaport, William J.; Segal, Erwin M.; Shapiro, Stuart C.; Zubin, David A.; Bruder, Gail A.; Duchan, Judith F.; Almeida, Michael J.; Daniels, Joyce H.; Galbraith, Mary M.; Wiebe, Janyce M.; & Yuhan, Albert Hanyong (1989a), "Deictic Centers and the Cognitive Structure of Narrative Comprehension", *Technical Report 89-01* (Buffalo: SUNY Buffalo Department of Computer Science).
- Rapaport, William J.; Segal, Erwin M.; Shapiro, Stuart C.; Zubin, David A.; Bruder, Gail A.; Duchan, Judith F.; & Mark, David M. (1989b), "Cognitive and Computer Systems for Understanding Narrative Text", *Technical Report 89-07* (Buffalo: SUNY Buffalo Department of Computer Science).
- Rapaport, William J., & Shapiro, Stuart C. (1995), "Cognition and Fiction", in Judith F. Duchan, Gail A. Bruder, & Lynne E. Hewitt (eds.), *Deixis in Narrative: A Cognitive Science Perspective* (Hillsdale, NJ: Lawrence Erlbaum Associates): 107–128; an abridged and slightly edited version appears as Rapaport, William J., & Shapiro, Stuart C. (forthcoming), "Cognition and Fiction: An Introduction", in Ashwin Ram & Kenneth Moorman (eds.), *Understanding Language Understanding: Computational Models of Reading* (Cambridge, MA: MIT Press).
- Rapaport, William J.; Shapiro, Stuart C.; & Wiebe, Janyce M. (1997), "Quasi-Indexicals and Knowledge Reports", *Cognitive Science* 21: 63–107.
- Rosch, Eleanor (1978), "Principles of Categorization", in Eleanor Rosch & Barbara B. Lloyd (eds.), *Cognition and Categorization* (Hillsdale, NJ: Lawrence Erlbaum Associates): 27–48.

- Schank, Roger C., & Abelson, Robert P. (1977), Scripts, Plans, Goals and Understanding (Hillsdale, NJ: Lawrence Erlbaum Associates).
- Searle, John R. (1980), "Minds, Brains, and Programs", Behavioral and Brain Sciences 3: 417-457.
- Segal, Erwin M. (1995), "A Cognitive-Phenomenological Theory of Fictional Narrative", in Judith F. Duchan, Gail A. Bruder, & Lynne E. Hewitt (eds.), *Deixis in Narrative: A Cognitive Science Perspective* (Hillsdale, NJ: Lawrence Erlbaum Associates): 61–78.
- Sellars, Wilfrid (1955), "Some Reflections on Language Games", in *Science, Perception and Reality* (London: Routledge & Kegan Paul, 1963): 321–358.
- Shapiro, Stuart C. (1979), "The SNePS Semantic Network Processing System", in Nicholas Findler (ed.), Associative Networks: Representation and Use of Knowledge by Computers (New York: Academic Press): 179–203.
- Shapiro, Stuart C. (1982), "Generalized Augmented Transition Network Grammars for Generation from Semantic Networks", American Journal of Computational Linguistics 8: 12–25.
- Shapiro, Stuart C. (1989), "The CASSIE Projects: An Approach to Natural Language Competence", *Proceedings of the 4th Portugese Conference on Artificial Intelligence (Lisbon)* (Berlin: Springer-Verlag): 362–380.
- Shapiro, Stuart C., & Rapaport, William J. (1987), "SNePS Considered as a Fully Intensional Propositional Semantic Network", in Nick Cercone & Gordon McCalla (eds.), *The Knowledge Frontier: Essays in the Representation of Knowledge* (New York: Springer-Verlag): 262–315; shorter version appeared in *Proceedings of the 5th National Conference on Artificial Intelligence (AAAI-86, Philadelphia)* (Los Altos, CA: Morgan Kaufmann): 278–283; revised version of the shorter version appears as "A Fully Intensional Propositional Semantic Network", in Leslie Burkholder (ed.), *Philosophy and the Computer* (Boulder, CO: Westview Press, 1992): 75–91.
- Shapiro, Stuart C., & Rapaport, William J. (1991), "Models and Minds: Knowledge Representation for Natural-Language Competence", in Robert Cummins & John Pollock (eds.), *Philosophy and AI: Essays at the Interface* (Cambridge, MA: MIT Press): 215–259.
- Shapiro, Stuart C., & Rapaport, William J. (1992), "The SNePS Family", Computers and Mathematics with Applications 23: 243–275; reprinted in Fritz Lehmann (ed.), Semantic Networks in Artificial Intelligence (Oxford: Pergamon Press, 1992): 243–275.
- Shapiro, Stuart C., & Rapaport, William J. (1995), "An Introduction to a Computational Reader of Narrative", in Judith F. Duchan, Gail A. Bruder, & Lynne E. Hewitt (eds.), *Deixis in Narrative: A Cognitive Science Perspective* (Hillsdale, NJ: Lawrence Erlbaum Associates): 79–105.
- Siskind, Jeffrey Mark (1996), "A Computational Study of Cross-Situational Techniques for Learning Word-to-Meaning Mappings", Cognition 61: 39–91.
- Srihari, Rohini K. (1991), "PICTION: A System that Uses Captions to Label Human Faces in Newspaper Photographs", *Proceedings* of the 9th National Conference on Artificial Intelligence (AAAI-91, Anaheim) (Menlo Park, CA: AAAI Press/MIT Press): 80–85.
- Srihari, Rohini K., & Rapaport, William J. (1989), "Extracting Visual Information From Text: Using Captions to Label Human Faces in Newspaper Photographs", *Proceedings of the 11th Annual Conference of the Cognitive Science Society (Ann Arbor, MI)* (Hillsdale, NJ: Lawrence Erlbaum Associates): 364–371.
- Sternberg, Robert J. (1987), "Most Vocabulary is Learned from Context", in Margaret G. McKeown & Mary E. Curtis (eds.), *The Nature of Vocabulary Acquisition* (Hillsdale, NJ: Lawrence Erlbaum Associates): 89–105.
- Winston, Patrick Henry (1975), "Learning Structural Descriptions from Examples", in Patrick Henry Winston (ed.), *The Psychology of Computer Vision* (New York: McGraw-Hill): 157–209; reprinted in Ronald J. Brachman & Hector J. Levesque (eds.), *Readings in Knowledge Representation* (Los Altos, CA: Morgan Kaufmann, 1985): 141–168.
- Zadrozny, Wlodek, & Jensen, Karen (1991), "Semantics of Paragraphs", Computational Linguistics 17: 171-209.
- Zernik, Uri, & Dyer, Michael G. (1987), "The Self-Extending Phrasal Lexicon", Computational Linguistics 13: 308-327.