

# Bibliography

## List of Abbreviations:

- ACL** Association for Computational Linguistics, Proceedings of the Annual Meeting of the
- BLS** Berkeley Linguistics Society, Proceedings of the Annual Meeting of the
- CLS** Chicago Linguistic Society, Papers from the Regional Meeting of the
- COLING** International Conference on Computational Linguistics, Proceedings of the
- EACL** European Chapter of the Association for Computational Linguistics, Proceedings of the Conference of the
- ECAI** European Conference on Artificial Intelligence, Proceedings of the
- IJCAI** International Joint Conference on Artificial Intelligence, Proceedings of the
- INLG** International Workshop on Natural Language Generation, Proceedings of the
- IWPT** International Workshop on Parsing Technologies, Proceedings of the
- NELS** North Eastern Linguistic Society, Proceedings of the Annual Meeting of the
- RNLP** Recent Advances in Natural Language Processing, Proceedings of International Conference on

Anthony Ades and Mark J. Steedman. 1982. On the Order of Words. *Linguistics and Philosophy*, 4:517–558.

Alfred V. Aho and J. D. Ullman. 1972. *The Theory of Parsing, Translation, and Compiling. Vol. 1: Parsing*. Englewood Cliffs, NJ: Prentice-Hall.

Reiko Aoki. 1992. *Gendaigo Joshi “Ha”-no Koubunron-teki Kenkyu (Syntactic Analysis of “Wa” in Modern Japanese)*. Tokyo: Kasama Shoin.

- Jennifer Arnold, Antonio Losongco, Ryan Ginstrom, Amy Brynolfson, and Thomas Wasow. 1997. Save the worst for last: The effects of Syntactic Complexity and Information Structure on Constituent Ordering. In *Proceedings of Linguistic Society of America Annual Meeting, Chicago, January 1997*.
- Nicholas Asher. 1993. *Reference to Abstract Objects in Discourse*. Dordrecht: Kluwer.
- Jay David Atlas. 1991. Topic/Comment, Presupposition, Logical Form and Focus Stress Implications: The Case of Focal Particles *only* and *also*. *Journal of Semantics*, 8:127–147.
- J. L. Austin. 1962. *How to Do Things with Words*. Oxford: Clarendon Press.
- Emmon Bach. 1979. Control in Montague Grammar. *Linguistic Inquiry*, 10(4):515–531.
- Jason Baldridge. 1998. *Local Scrambling and Syntactic Asymmetries*. Masters thesis, University of Pennsylvania.
- David Ian Beaver. 1997. Presupposition. In Johan van Benthem and Alice ter Meulen, editors, *Handbook of Logic and Language*, pages 939–1008. Cambridge, MA: MIT Press.
- Tilman Becker, Aravind Joshi, and Owen Rambow. 1991. Long-Distance Scrambling and Tree Adjoining Grammars. In *EACL 5, Berlin, April 1991*, pages 21–26.
- Sylvie Billot and Bernard Lang. 1989. The Structure of Shared Forests in Ambiguous Parsing. In *ACL 27, Vancouver, Canada, June 1989*, pages 143–151.
- Betty J. Birner. 1994. Information status and word order: an analysis of English inversion. *Language*, 70(2):233–259.
- Betty J. Birner. 1997. The Linguistic Realization of Inferrable Information. *Language and Communication*, 17(2):133–148.
- Betty J. Birner and Gregory Ward. 1999. *Information status and noncanonical word order in English*. Amsterdam: John Benjamins.
- Wayne C. Booth, Gregory G. Colomb, and Joseph M. Williams. 1995. *The Craft of Research*. Chicago: University of Chicago Press.
- Johan Bos, Paul Buitelaar, and Anne-Marie Mineur. 1995. Bridging as coercive accommodation. In *Proceedings of the Workshop: Computational Logic for Natural Language Processing*,

*Edinburgh, April 1995.*

- Norbert Bröcker, Udo Hahn, and Susanne Schacht. 1994. Concurrent Lexicalized Dependency Parsing: The ParseTalk Model. In *COLING-94, Kyoto, August 1994*, pages 379–385.
- Gillian Brown. 1995. *Speakers, listeners and communication: Explorations in discourse analysis*. Cambridge: Cambridge University Press.
- Gillian Brown and George Yule. 1983. *Discourse Analysis*. Cambridge: Cambridge University Press.
- Daniel Büring. 1997a. The Great Scope Inversion Conspiracy. *Linguistics and Philosophy*, 20:175–194.
- Daniel Büring. 1997b. *The Meaning of Topic and Focus: The 59th Street Bridge Accent*. London: Routledge.
- Greg N. Carlson. 1980. *Reference to kinds in English* (originally a PhD thesis in 1977). New York: Garland Publications.
- Bob Carpenter. 1991. The Generative Power of Categorical Grammars and Head-Driven Phrase Structure Grammars with Lexical Rules. *Computational Linguistics*, 17(3):301–313.
- Bob Carpenter. 1992. *The Logic of Typed Feature Structures*. Cambridge: Cambridge University Press.
- Wallace L. Chafe. 1976. Givenness, Contrastiveness, Definiteness, Subjects, Topics, and Point of View. In Charles Li, editor, *Subject and Topic*, pages 25–55. New York: Academic Press.
- Wallace Chafe. 1994. *Discourse, Consciousness, and Time*. Chicago: University of Chicago Press.
- Gennaro Chierchia. 1989. Structured Meanings, Thematic Roles and Control. In Gennaro Chierchia, Barbara H. Partee, and Raymond Turner, editors, *Properties, Types, and Meaning. Vol. 2: Semantic Issues*, pages 131–166. Dordrecht: Kluwer.
- Gennaro Chierchia and Sally McConnell-Ginet. 1990. *Meaning and Grammar: An Introduction to Semantics*. Cambridge, MA: MIT Press.
- Hye-Won Choi. 1996. *Optimizing Structure in Context: Scrambling and Information Structure*.

- PhD thesis, Stanford University.
- Hye-Won Choi. 1997. Topic and Focus in Korean: The Information Partition by Phrase Structure and Morphology. In Ho min Sohn and John Haig, editors, *Japanese/Korean Linguistics, Vol. 6*, pages 545–561. Stanford, CA: CSLI Publications.
- Noam Chomsky. 1971. Deep structure, surface structure, and semantic interpretation. In Danny D. Steinberg and Leon A. Jakobovits, editors, *Semantics: An Interdisciplinary Reader in Philosophy, Linguistics, and Psychology*, pages 183–216. Cambridge: Cambridge University Press.
- Patricia M. Clancy and Pamela Downing. 1987. The Use of Wa as a Cohesion Marker in Japanese Oral Narratives. In John Hinds and Shoichi Iwasaki, editors, *Perspectives on Topicalization: The Case of Japanese 'WA'*, pages 3–56. Amsterdam: John Benjamins.
- Herbert H. Clark. 1996. *Using language*. Cambridge: Cambridge University Press.
- Herbert H. Clark and Susan E. Haviland. 1977. Comprehension and the Given-New Contract. In Roy O. Freedle, editor, *Discourse Production and Comprehension*, pages 1–40. Norwood, NJ: Ablex.
- Jacob Cohen. 1960. A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, 20:37–46.
- Peter C. Collins. 1991. *Cleft and pseudo-cleft constructions in English*. London: Routledge.
- Heles Contreras. 1976. *A theory of word order with special reference to Spanish*. Amsterdam: North Holland.
- Ron Cowan. 1995. What are discourse principles made of? In Pamela Downing and Michael Noonan, editors, *Word Order in Discourse*, pages 29–49. Amsterdam: John Benjamins.
- M. J. Cresswell. 1985. *Structured Meanings: The Semantics of Propositional Attitudes*. Cambridge, MA: MIT Press.
- Peter W. Culicover and Michael Rochemont. 1983. Stress and Focus in English. *Language*, 59(1):123–165.
- Deborah Dahl, Martha Palmer, and Rebecca Passoneau. 1987. Nominalization in PUNDIT. In *ACL 25, Stanford, CA, June 1987*.

- Frantisek Daneš. 1974. Functional Sentence Perspective and the Organization of the Text. In Frantisek Daneš, editor, *Papers on functional sentence perspective*, pages 106–128. Prague: Academia and The Hague: Mouton.
- Charles M. De Wolf. 1987. WA in Diachronic Perspective. In John Hinds and Shoichi Iwasaki, editors, *Perspectives on Topicalization: The Case of Japanese ‘WA’*, pages 265–290. Amsterdam: John Benjamins.
- Judy Delin. 1995. Presupposition and Shared Knowledge in *It*-Clefts. *Language and Cognitive Process*, 10(2):97–120.
- Molly Diesing. 1992. *Indefinites*. Cambridge, MA: MIT Press.
- Christy Doran, Dania Egedi, Beth Ann Hockey, B. Srinivas, and Martin Zaidel. 1994. XTAG system – A Wide Coverage Grammar for English. In *COLING-94, Kyoto, August 1994*, pages 922–928.
- Jochen Dörre. 1997. Efficient Construction of Underspecified Semantics under Massive Ambiguity. In *ACL 35/EACL 8, Madrid, July 1997*, pages 386–393.
- David R. Dowty. 1979. Dative ‘Movement’ and Thomason’s Extensions of Montague Grammar. In Steven Davis and Marianne Mithun, editors, *Linguistics, Philosophy, and Montague Grammar*, pages 153–222. Austin, TX: University of Texas Press.
- David R. Dowty. 1988. Type Raising, Functional Composition, and Non-Constituent Conjunction. In Richard Oehrle, Emmon Bach, and Deirdre Wheeler, editors, *Categorial Grammars and Natural Language Structures*, pages 153–197. Dordrecht: D. Reidel.
- Matthew S. Dryer. 1996. Focus, Pragmatic presupposition, and activated proposition. *Journal of Pragmatics*, 26:475–523.
- Marc Dymetman. 1997. Charts, Interaction-Free Grammars, and the Compact Representation of Ambiguity. In *IJCAI 97, Nagoya, Japan, August 1997*, pages 1002–1007.
- Jan van Eijck. 1996. Presupposition and Information Updating. In M. Kanazawa et al., editors, *Quantifiers, Deduction, and Context*, pages 87–110. Stanford, CA: CSLI Publications.
- Jason Eisner. 1996. Efficient Normal-Form Parsing for Combinatory Categorial Grammar. In

- ACL 34, Santa Cruz, CA, June 1996*, pages 79–86.
- Martin Emms. 1993. Parsing with polymorphism. In *EACL 6, Utrecht, April 1993*, pages 120–129.
- Nomi Erteschik-Shir. 1997. *The dynamics of focus structure*. Cambridge: Cambridge University Press.
- Nomi Erteschik-Shir. 1998. The Syntax-Focus Structure Interface. In Peter W. Culicover and Louise McNally, editors, *Syntax and Semantics, Vol. 29: The limits of syntax*, pages 211–240. New York: Academic Press.
- Alice Nancy Finn. 1984. Intonational Accompaniments of Japanese Morphemes *WA* and *GA*. *Language and Speech*, 27:47–57.
- Jan Firbas. 1964. On Defining the Theme in Functional Sentence Analysis. *Travaux Linguistiques de Prague*, 1:267–280.
- Joseph L. Fleiss. 1971. Measuring nominal scale agreement among many raters. *Psychological Bulletin*, 76:378–382.
- W. A. Foley. 1994. Information Structure. In R. E. Asher, editor, *The Encyclopedia of Language and Linguistics, Vol. 3*, pages 1678–1685. Oxford: Pergamon Press.
- Joyce Friedman and Ramarathnam Venkatesan. 1986. Categorical and Non-Categorical Languages. In *ACL 24, New York, NY, June 1986*, pages 75–77.
- Peter H. Fries. 1994. On Theme, Rheme and discourse goals. In Malcolm Coulthard, editor, *Advances in Written Text Analysis*, pages 229–249. London: Routledge.
- LTF Gamut. 1991. *Logic, Language, and Meaning. Vol. 2*. Chicago: University of Chicago Press.
- Claire Gardent and Michael Kohlhase. 1996. Focus and Higher-Order Unification. In *COLING-96, Copenhagen, August 1996*.
- Gerald Gazdar. 1979. *Pragmatics: Implicature, Presupposition, and Logical Form*. New York: Academic Press.
- Gerald. Gazdar, Ewan Klein, Geoffrey K. Pullum, and Ivan A. Sag. 1985. *Generalized Phrase Structure Grammar*. Cambridge, MA: Harvard University Press.

- H. P. Grice. 1975. Logic and Conversation. In Peter Cole and Jerry Morgan, editors, *Syntax and Semantics, 3: Speech Acts*, pages 305–315. New York: Academic Press.
- Barbara J. Grosz and Candace L. Sidner. 1986. Attention, Intentions, and the Structure of Discourse. *Computational Linguistics*, 12(3):175–204.
- Barbara J. Grosz, Aravind K. Joshi, and Scott Weinstein. 1995. Centering: A Framework for Modeling the Local Coherence of Discourse. *Computational Linguistics*, 21(2):203–226.
- Jeanette K. Gundel. 1985. ‘Shared Knowledge’ and Topicality. *Journal of Pragmatics*, 9:83–107.
- Jeanette K. Gundel. 1996. Relevance Theory Meets the Givenness Hierarchy An Account of Inferrables. In T. Fretheim and J. Gundel, editors, *Reference and Accessibility*, pages 141–153. Amsterdam: John Benjamins.
- Takao Gunji. 1987. *Japanese Phrase Structure Grammar: A Unification-Based Approach*. Dordrecht: D. Reidel.
- Carsten Günther, Claudia Maienborn, and Andrea Schopp. 1999. The Processing of Information Structure. In Peter Bosch and Rob A. van der Sandt, editors, *Focus: Linguistic, Cognitive, and Computational Perspectives*, pages 18–42. Cambridge: Cambridge University Press.
- Carlos Gussenhoven. 1999. On the Limits of Focus Projection in English. In Peter Bosch and Rob A. van der Sandt, editors, *Focus: Linguistic, Cognitive, and Computational Perspectives*, pages 43–55. Cambridge: Cambridge University Press.
- Liliane Haegeman. 1991. *Introduction to Government and Binding Theory*. Oxford: Blackwell Publishers.
- Udo Hahn. 1995. Distributed Text Structure Parsing – Computing Thematic Progression in Expository Texts. In Gert Rickheit and Christopher Habel, editors, *Focus and Coherence in Discourse Processing*, pages 214–250. Berlin: Walter de Gruyter.
- Udo Hahn, Katja Markert, and Michael Strube. 1996. A Conceptual Reasoning Approach to Textual Ellipsis. In *ECAI 96, Budapest, August 1996*, pages 572–576.
- Eva Hajičová. 1991. Dependency-Based Parser for Topic and Focus. In Masaru Tomita, editor, *Current Issues in Parsing Technologies*, pages 127–138. Dordrecht: Kluwer.

- Eva Hajičová, Petr Sgall, and Hana Skoumalová. 1993. Identifying Topic and Focus by an Automatic Procedure. In *EACL 6, Utrecht, April 1993*, pages 178–182.
- Eva Hajičová, Hana Skoumalová, and Petr Sgall. 1995. An Automatic Procedure for Topic-Focus Identification. *Computational Linguistics*, 21(1):81–94.
- Michael A. K. Halliday. 1967. Notes on Transitivity and Theme in English (Part II). *Journal of Linguistics*, 3:199–244.
- Chung-hye Han. 1998. Asymmetry in the Interpretation of ‘-(n)un’ in Korean. In Noriko Akatsuka et al., editors, *Japanese/Korean Linguistics 7*, pages 1–15. Stanford, CA: CSLI Publications.
- Yoko Hasegawa. 1996. *A Study of Japanese Clause Linkage*. Stanford, CA: CSLI Publications.
- John A. Hawkins. 1978. *Definiteness and indefiniteness : a study in reference and grammaticality prediction*. London: Croom Helm.
- John A. Hawkins. 1991. On (in)definite articles: implicatures and (un)grammaticality prediction. *Journal of Linguistics*, 27:405–442.
- John A. Hawkins. 1994. *A performance theory of order and constituency*. Cambridge: Cambridge University Press.
- Irene Heim. 1982. *The Semantics of Definite and Indefinite Noun Phrases*. PhD thesis, University of Massachusetts, Amherst.
- Julia E. Heine. 1998. Definiteness Predictions for Japanese Noun Phrases. In *COLING-ACL 98, Montreal, August 1998*, pages 519–525.
- Herman Hendriks. 1993. *Studied Flexibility: Categories and Types in Syntax and Semantics*. PhD thesis, Universiteit van Amsterdam.
- Herman Hendriks and Paul Dekker. 1996. Links without Locations. In *Tenth Amsterdam Colloquium*, pages 339–358.
- Mark Hepple. 1987. Methods for Parsing Combinatory Grammars and the Spurious Ambiguity Problem.
- Mark Hepple. 1990. *The Grammar and Processing of Order and Dependency: a Categorical*

- Approach*. PhD thesis, University of Edinburgh.
- Mark Hepple and Glyn Morrill. 1989. Parsing and Derivational Equivalence. In *EACL 4, Manchester, April 1989*, pages 10–18.
- Caroline Heycock. 1994. Focus Projection in Japanese. In *NELS 24, Amherst, MA, November 1994*, pages 157–171.
- Roger Higgins. 1979. *The Pseudocleft Construction in English*. New York: Garland Publications.
- John Hinds. 1987. Thematization, Assumed Familiarity, Staging, and Syntactic Binding in Japanese. In John Hinds, Senko K. Maynard, and Shoichi Iwasaki, editors, *Perspectives on Topicalization: The Case of Japanese ‘wa’*, pages 83–106. Amsterdam: John Benjamins.
- Toru Hisamitsu and Yoshihiko Nitta. 1994. An Efficient Treatment of Japanese Verb Inflection for Morphological Analysis. In *COLING-94, Kyoto, August 1994*, pages 194–200.
- Jerry R. Hobbs. 1979. Coherence and Coreference. *Cognitive Science*, 3:67–90.
- Beth Ann Hockey. 1998. *The Interpretation and Realization of Focus: An Experimental Investigation of Focus in English and Hungarian*. PhD thesis, University of Pennsylvania.
- Beryl Hoffman. 1993. The Formal Consequences of Using Variables in CCG Categories. In *ACL 31, Columbus, OH, June 1993*.
- Beryl Hoffman. 1994. Generating Context-Appropriate Word Orders in Turkish. In *INLG 94*.
- Beryl Hoffman. 1995. *The Computational Analysis of the Syntax and Interpretation of “Free” Word Order in Turkish*. PhD thesis, University of Pennsylvania.
- Beryl Hoffman. 1996. Translating into Free Word Order Languages. In *COLING-96, Copenhagen, August 1996*, pages 556–561.
- Beryl Hoffman. 1998. Word Order, Information Structure, and Centering in Turkish. In Marilyn Walker et al., editors, *Centering in Discourse*. Oxford: Oxford University Press.
- Laurence R. Horn. 1981. Exhaustiveness and the Semantics of Clefts. In *NELS 11*, pages 125–142.
- Kei Huruta. 1982. Kokugo-de-no Hitei Hyougen-no Imi: Zokuchou (Afterthought of “Meaning of Negation in the Japanese Language”). *Mathematical Linguistics*, 13(7):296–315.

- Shoichi Iwasaki. 1987. Identifiability, Scope-Setting, and the Particle Wa: A Study of Japanese Spoken Expository Discourse. In John Hinds and Shoichi Iwasaki, editors, *Perspectives on Topicalization: The Case of Japanese 'WA'*. Amsterdam: John Benjamins.
- Ray S. Jackendoff. 1972. *Semantic interpretation in Generative Grammar*. Cambridge, MA: MIT Press.
- Joachim Jacobs. 1986. The Syntax of Focus and Adverbials in German. In Werner Abraham and Sjaak de Meij, editors, *Topic, Focus, and Configurationality*, pages 103–127. Amsterdam: John Benjamins.
- Gerhard Jäger. 1996. *Topics in Dynamics Semantics*. PhD thesis, Humboldt-Universität zu Berlin.
- Gerhard Jäger. 1999. Topic, Focus and Weak Quantifiers. In Peter Bosch and Rob A. van der Sandt, editors, *Focus: Linguistic, Cognitive, and Computational Perspectives*, pages 187–212. Cambridge: Cambridge University Press.
- Kristiina Jokinen and Tsuyoshi Morimoto. 1997. Topic Information and Spoken Dialogue Systems. In *Proceedings of Natural Language Processing Pacific Rim Symposium (NLPRS), Phuket, Thailand, December 1997*.
- Aravind K. Joshi. 1985. Tree Adjoining Grammars. In David R. Dowty, Lauri Karttunen, and Arnold M. Zwicky, editors, *Natural Language Parsing*, pages 206–250. Cambridge: Cambridge University Press.
- Aravind K. Joshi, Leon Levy, and Masako Takahashi. 1975. Tree adjunct Grammars. *Journal of Computer Systems Science*, 21(2):136–163.
- Aravind K. Joshi, K. Vijay-Shanker, and David Weir. 1991. The Convergence of Mildly Context-Sensitive Grammatical Formalisms. In Peter Sells et al., editors, *Foundational Issues in Natural Language Processing*, pages 31–81. Cambridge, MA: MIT Press.
- Aravind K. Joshi, Tilman Becker, and Owen Rambow. 1994. Complexity of Scrambling: A New Twist to the Competence - Performance Distinction. In *3e Colloque International sur les grammaires d'Arbres Adjoints*.
- Hans Kamp. 1981. A theory of truth and semantic representation. In J. Groenendijk et al., editors, *Formal Methods in the Study of Language*, pages 277–322. Amsterdam: Mathematisch

Centrum.

- Lauri Karttunen. 1973. Presuppositions of Compound Sentences. *Linguistic Inquiry*, 4(2):169–193.
- Lauri Karttunen. 1976. Discourse referents. In J. McCawley, editor, *Syntax and Semantics*, Vol. 7, pages 363–385. New York: Academic Press.
- Lauri Karttunen. 1986. Radical Lexicalism. Technical Report 86-68, Stanford, CA: CSLI Publications.
- Lauri Karttunen and Stanley Peters. 1979. Conventional implicature. In *Syntax and Semantics*, Vol. 11, pages 1–56. New York: Academic Press.
- Masashi Kawashima. 1989. Topic ‘WA’: Its Generation and Licensing. *Sophia Linguistica*, 27:57–69.
- Martin Kay. 1975. Syntactic Processing and Functional Sentence Perspective. In *Proceedings of the Conference on Theoretical Issues in Natural Language Processing (TINLP)*, pages 12–15.
- Martin Kay, Jean Mark Gawron, and Peter Norvig. 1994. *Verbmobil : a translation system for face-to-face dialog*. Stanford, CA: CSLI Publications.
- Tracy Holloway King. 1995. *Configuring Topic and Focus in Russian*. Stanford, CA: CSLI Publications.
- Kataline É. Kiss. 1981. On the Japanese ‘Double Subject’ Construction. *The Linguistic Review*, 1:155–170.
- Kataline É. Kiss. 1987. *Configurationality in Hungarian*. Dordrecht: Kluwer.
- Kataline É. Kiss. 1995. Introduction. In Kataline É. Kiss, editor, *Discourse Configurational Languages*. Dordrecht: Kluwer.
- Nobo Komagata. 1997a. Efficient Parsing for CCGs with Generalized Type-Raised Categories. In *IWPT 97, Cambridge, MA, September 1997*, pages 135–146.
- Nobo Komagata. 1997b. Efficient Parsing for CCGs with Generalized Type-Raised Categories. Technical report (IRCS-97-16), University of Pennsylvania.
- Nobo Komagata. 1997c. Generative Power of CCGs with Generalized Type-Raised Categories.

- In *ACL 35/EACL 8, Madrid, July 1997 (Student Session)*, pages 513–515.
- Nobo Komagata. 1997d. Generative Power of CCGs with Generalized Type-Raised Categories. Technical report (IRCS-97-15), University of Pennsylvania.
- Nobo Komagata. 1998a. Computer-Assisted Writing System: Improving Readability with Respect to Information Structure. In *Proceedings of International Conference on Natural Language Processing and Industrial Applications (NLP+IA98), Moncton, Canada, August 1998*, pages 200–204.
- Nobo Komagata. 1998b. *Contrastive Function of Japanese Particle WA*. Presented at the First Annual Northeast Cognitive Science Society Graduate Conference (NECSS98), Ithaca, NY, May 1998. Available via <http://www.cis.upenn.edu/komagata/papers.html>.
- Esther König. 1994. A Hypothetical Reasoning Algorithm for Linguistic Analysis. *Journal of Logic and Computation*, 4(1):1–19.
- Angelica Kratzer. 1995. Stage-level and Individual-level Predicates. In Gregory N. Carlson and Francis Jeffry Pelletier, editors, *The Generic Book*, pages 125–175. Chicago: University of Chicago Press.
- Manfred Krifka. 1992. A Compositional Semantics for Multiple Focus. In Joachim Jacobs, editor, *Informationsstruktur und Grammatik (Linguistische Berichte, Sonderheft 4/1991-92)*, pages 17–53. Opladen: Westdeutscher Verlag.
- Haruo Kubozono. 1993. *The Organization of Japanese Prosody*. Tokyo: Kuroshio Publishers.
- Susumu Kuno. 1972. Functional Sentence Perspective: A Case Study from Japanese and English. *Linguistic Inquiry*, 3(3):269–320.
- Susumu Kuno. 1973. *The Structure of the Japanese Language*. Cambridge, MA: MIT Press.
- Susumu Kuno. 1976. Gapping: a functional analysis. *LI*, 7:300–318.
- Susumu Kuno. 1978. *Danwa-no Bunpou (Discourse Grammar)*. Tokyo: Taishukan Shoten.
- Jan van Kuppevelt. 1995. Discourse structure, topicality and questioning. *Journal of Linguistics*, 31:109–147.

- Jan van Kuppevelt. 1996. Inferring from Topics: Scalar Implicatures as Topic-Dependent inferences. *Linguistics and Philosophy*, 19:393–443.
- Akira Kurahone. 1983. *A Categorical Analysis of Derived Verbs in Japanese*. PhD thesis, University of Texas, Austin.
- Sadao Kurohashi and Makoto Nagao. 1994. Automatic Detection of Discourse Structure by Checking Surface Information in Sentences. In *COLING-94, Kyoto, August 1994*, pages 1123–1127.
- Robert Ladd. 1996. *Intonational Phonology*. Cambridge: Cambridge University Press.
- Joachim Lambek. 1988. The Mathematics of Sentence Structure. In Wojciech Buszkowski, Witold Marciszewski, and Johan Van Benthem, editors, *Categorical Grammar*. Amsterdam: John Benjamins.
- Knud Lambrecht. 1994. *Information Structure and Sentence Form: Topic, focus, and the mental representations of discourse referents*. Cambridge: Cambridge University Press.
- Fred Landman. 1996. Plurality. In Shalom Lappin, editor, *The Handbook of Contemporary Semantic Theory*, pages 425–457. Oxford: Blackwell Publishers.
- John Laver. 1994. *Principles of Phonetics*. Cambridge: Cambridge University Press.
- Yae-Sheik Lee. 1993. Exhaustivity, The Scalar Principle, and Focus Semantics. In *Proceedings of the 13th West Coast Conference on Formal Linguistics (WCCFL)*.
- Stephen C. Levinson. 1983. *Pragmatics*. Cambridge: Cambridge University Press.
- David Lewis. 1979. Scorekeeping in a Language Game. In Ariner Bäuerle et al., editors, *Semantics from Different Points of View*, pages 172–187. Berlin: Springer-Verlag.
- Susann LuperFoy. 1997. Discourse Processing for Voice-to-voice Machine Translation. In Christa Hauenschild and Susanne Heizmann, editors, *Machine Translation and Translation Theory*, pages 223–250. Berlin: Mouton de Gruyter.
- Arman Maghbouleh. 1996. A Logistic Regression Model for Detecting Prominences. In *Proceedings of the Fourth International Conference on Spoken Language Processing (ICSLP), Philadelphia, PA, October, 1996*.

- William Mann and Sandra Thompson. 1988. Rhetorical structure theory: Toward a functional theory of text organization. *Text*, 8(3):243–281.
- Mitchell P. Marcus. 1980. *A Theory of Syntactic Recognition for Natural Language*. Cambridge, MA: MIT Press.
- Vilém Mathesius. 1975. *A Functional Analysis of Present Day English on a General Linguistic Basis* (edited by Josef Vachek). The Hague: Mouton.
- Christian M. I. M. Matthiessen and John A. Bateman. 1991. *Text Generation and Systemic-Functional Linguistics: Experiences from English and Japanese*. London: Pinter Publishers.
- Senko K. Maynard. 1987. Thematization as a Staging Device in the Japanese Narrative. In John Hinds and Shoichi Iwasaki, editors, *Perspectives on Topicalization: The Case of Japanese 'WA'*, pages 57–82. Amsterdam: John Benjamins.
- David B. McDonald. 1981. Compound: A Program that Understands Noun Compounds. In *IJCAI 81, Vancouver, Canada, August 1981*, page 1061.
- Naomi Hanaoka McGloin. 1987. The Role of *Wa* in Negation. In John Hinds and Shoichi Iwasaki, editors, *Perspectives on Topicalization: The Case of Japanese 'WA'*, pages 165–184. Amsterdam: John Benjamins.
- Kathleen R. McKeown. 1985. *Text Generation: Using Discourse Strategies and Focus Constraints to Generate Natural Language Text*. Cambridge: Cambridge University Press.
- Louise McNally. 1998. On the Linguistic Encoding of Information Packaging Instructions. In Peter W. Culicover and Louise McNally, editors, *Syntax and Semantics, Vol. 29: The limits of syntax*, pages 161–183. New York: Academic Press.
- George Miller and Noam Chomsky. 1963. Finitary Models of Language Users. In R.R. Luce et al., editors, *Handbook of Mathematical Psychology, Vol. II*, pages 419–491. John Wiley and Sons.
- Shigeru Miyagawa. 1987. *Wa* and the WH Phrase. In John Hinds and Shoichi Iwasaki, editors, *Perspectives on Topicalization: The Case of Japanese 'WA'*, pages 185–217. Amsterdam: John Benjamins.

- Shigeru Miyagawa. 1997. Against Optional Scrambling. *Linguistic Inquiry*, 28(1):1–25.
- Richard Montague. 1974. The Proper Treatment of Quantification in Ordinary English. In Richard H. Thompson, editor, *Formal Philosophy*, pages 247–270. New Haven, CT: Yale University Press.
- Michael Moortgat. 1988. *Categorial Investigations: Logical and Linguistic Aspects of the Lambek Calculus*. Dordrecht: Foris.
- Glyn V. Morrill. 1994. *Type logical grammar: categorial logic of signs*. Dordrecht: Kluwer.
- Megan Moser and Johanna D. Moore. 1995. Investigating cue selection and placement in tutorial discourse. In *ACL 33, Cambridge, MA, June 1995*, pages 130–135.
- Robert B. Most and Eli Saltz. 1979. Information Structure in Sentences: New Information. *Language-and-Speech*, 22(1):89–95.
- Masaki Murata and Makoto Nagao. 1998. An Estimate of Referent of Noun Phrases in Japanese Sentences. In *COLING-ACL 98, Montreal, August 1998*, pages 912–916.
- Makoto Nagao. 1989. *Machine Translation: How Far Can It Go? Translated by Norman D. Cook*. Oxford: Oxford University Press.
- Katashi Nagao. 1994. A Preferential Constraint Satisfaction Technique for Natural Language Analysis. *IEICE Trans. Information & Systems*, E77-D(2).
- Hisashi Noda. 1996. *WA-to GA (WA and GA)*. Tokyo: Kuroshio Publishers.
- Elena V. Paducheva. 1996. Theme-rheme structures: Its exponents and its semantic interpretation. In Barbara H. Partee and Petr Sgall, editors, *Discourse and Meaning*, pages 273–287. Amsterdam: John Benjamins.
- Martha S. Palmer. 1990. *Semantic Processing for Finite Domains*. Cambridge: Cambridge University Press.
- Martha S. Palmer, Rebecca J. Passonneau, Carl Weir, and Tim Finin. 1993. The KERNEL text understanding system. *Artificial Intelligence*, 63:17–68.
- Bart Papageaij and Klaus Schubert. 1988. *Text Coherence in Translation*. Dordrecht: Foris.
- Remo Pareschi and Mark Steedman. 1987. A Lazy Way to Chart-Parse with Categorial Grammars.

- In *ACL 25, Stanford, CA, June 1987*, pages 81–88.
- Jong Cheol Park. 1996. *A Lexical Theory of Quantification in Ambiguous Query Interpretations*. PhD thesis, University of Pennsylvania.
- Jong C. Park, Martha Palmer, and Gay Washburn. 1997. An English Grammar Checker as a Writing Aid for Students of English as a Second Language. In *Descriptions of System Demonstrations and Videos of the Conference on Applied Natural Language Processing (ANLP5)*, Washington, DC, March-April 1997.
- Barbara H. Partee. 1996. Allegation and local accommodation. In Barbara H. Partee and Petr Sgall, editors, *Discourse and meaning: papers in honor of Eva Hajičová*, pages 65–86. Amsterdam: John Benjamins.
- Barbara H. Partee. 1999. Focus, Quantification, and Semantics-Pragmatics Issues, Preliminary Version. In Peter Bosch and Rob A. van der Sandt, editors, *Focus: Linguistic, Cognitive, and Computational Perspectives*, pages 213–231. Cambridge: Cambridge University Press.
- Lawrence C. Paulson. 1991. *ML for the Working Programmer*. Cambridge: Cambridge University Press.
- Jaroslav Peregrin. 1996. Topic and focus in a formal framework. In Barbara H. Partee and Petr Sgall, editors, *Discourse and Meaning*, pages 235–254. Amsterdam: John Benjamins.
- Fernando C.N. Pereira and Stuart M. Shieber. 1987. *Prolog and Natural-Language Analysis*. Stanford, CA: CSLI Publications.
- Janet B. Pierrehumbert and Mary E. Beckman. 1988. *Japanese Tone Structure*. Cambridge, MA: MIT Press.
- Janet Pierrehumbert and Julia Hirschberg. 1990. The Meaning of Intonational Contours in the Interpretation of Discourse. In Philip Cohen, Jerry Morgan, and Martha Pollack, editors, *Intentions in Communication*. Cambridge, MA: MIT Press.
- Massimo Poesio and Renata Vieira. 1998. A Corpus-Based Investigation of Definite Description Use. *Computational Linguistics*, pages 183–216.
- Massimo Poesio, Renata Vieira, and Simone Teufel. 1997. Resolving Bridging Descriptions in

- Unrestricted Text. In *ACL Workshop on Operational Factors in Robust Anaphora Resolution, Madrid, July 1997*.
- Carl Pollard and Ivan Sag. 1994. *Head-Driven Phrase Structure Grammar*. Chicago: University of Chicago Press.
- Paul Porter and Katsuhiko Yabushita. 1998. The Semantics and Pragmatics of Topic Phrases. *Linguistics and Philosophy*, 21:117–157.
- Scott Prevost. 1995. *A Semantics of Contrast and Information Structure for Specifying Intonation in Spoken Language Generation*. PhD thesis, University of Pennsylvania.
- Scott Prevost. 1996. An Information Structural Approach to Spoken Language Generation. In *ACL 34, Santa Cruz, CA, June 1996*, pages 294–301.
- Scott Prevost and Mark Steedman. 1993. Generating Contextually Appropriate Intonation. In *EACL 6, Utrecht, April 1993*, pages 332–340.
- Gary D. Prideaux. 1979. A Psycholinguistic Perspective on English Grammar. *Glossa*, 13(2):123–157.
- Ellen F. Prince. 1978. A Comparison of Wh-clefts and *It*-clefts in Discourse. *Language*, 54(4):883–906.
- Ellen F. Prince. 1981. Toward a Taxonomy of Given-New Information. In Peter Cole, editor, *Radical Pragmatics*, pages 223–256. New York: Academic Press.
- Ellen F. Prince. 1984. Topicalization and Left-Dislocation: A Functional Analysis. In Sheila J. White and Virginia Teller, editors, *Annals of New York Academy of Sciences, Vol. 433: Discourses in Reading and Linguistics*, pages 213–225. New York: The New York Academy of Sciences.
- Ellen F. Prince. 1986. On the Syntactic Marking of Presupposed Open Propositions. In *CLS22, Part 2*, pages 208–222.
- Ellen F. Prince. 1992. The ZPG letter: subjects, definiteness, and information-status. In S. Thompson and W. Mann, editors, *Discourse description: diverse analyses of a fund raising text*, pages 295–325. Amsterdam: John Benjamins.

- Ellen F. Prince. 1998. On the Limits of Syntax, with Reference to Left-Dislocation and Topicalization. In Peter W. Culicover and Louise McNally, editors, *Syntax and Semantics, Vol. 29: The limits of syntax*. New York: Academic Press.
- Stephen G. Pulman. 1997. Higher Order Unification and the Interpretation of Focus. *Linguistics and Philosophy*, 20:73–115.
- Randolph Quirk, Sidney Greenbaum, Geoffrey Leech, and Jan Svartvik. 1985. *A Comprehensive Grammar of the English Language*. London: Longman.
- Owen Rambow. 1994. *Formal and Computational Aspects of Natural Language Syntax*. PhD thesis, University of Pennsylvania.
- Owen Rambow and Aravind K. Joshi. 1994. A Processing Model for Free Word Order Languages. In Jr. C. Clifton, L. Frazier, and K. Rayner, editors, *Perspectives on Sentence Processing*, pages 267–301. Lawrence Erlbaum.
- Random House. 1993. The Random House Unabridged Electronic Dictionary.
- Keith Rayner and Alexander Pollatsek. 1987. Eye movements in reading: A tutorial review. In *Attention and performance 12: The psychology of reading*, pages 327–362. Hillsdale, NJ: Lawrence Erlbaum.
- Tanya Reinhart. 1982. Pragmatics and linguistics: an analysis of sentence topics. *Philosophica*, 27:53–94.
- Jeffrey C. Reynar. 1998. *Text Structuring: Algorithms, Applications and Evaluation*. PhD thesis, University of Pennsylvania.
- Craige Roberts. 1996. Information Structure in Discourse: Towards an Integrated Formal Theory of Pragmatics. In *OSU Working Papers in Linguistics 49, Papers in Semantics*, pages 91–136.
- Craige Roberts. 1998. Focus, the Flow of Information, and Universal Grammar. In Peter W. Culicover and Louise McNally, editors, *Syntax and Semantics, Vol. 29: The limits of syntax*, pages 109–160. New York: Academic Press.
- Michael S. Rochemont. 1986. *Focus in generative grammar*. Amsterdam: John Benjamins.
- Michael S. Rochemont. 1998. Phonological Focus and Structural Focus. In Peter W. Culicover

- and Louise McNally, editors, *Syntax and Semantics, Vol. 29: The limits of syntax*, pages 337–363. New York: Academic Press.
- Mats E. Rooth. 1985. *Association with Focus*. PhD thesis, University of Massachusetts, Amherst.
- Mats Rooth. 1992. A Theory of Focus Interpretation. *Natural Language Semantics*, 1:75–116.
- Mats Rooth. 1996. Focus. In Shalom Lappin, editor, *The Handbook of Contemporary Semantic Theory*, pages 271–297. Oxford: Blackwell Publishers.
- Bertrand Russell. 1948. *Human knowledge, its scope and limits*. New York: Simon and Schuster.
- Stuart J. Russell and Peter Norvig. 1995. *Artificial Intelligence: A Modern Approach*. Englewood Cliffs, NJ: Prentice-Hall.
- Kumi Sadakane and Masatoshi Koizumi. 1995. On the nature of the “dative” particle ni in Japanese. *Linguistics*, 33:5–33.
- Walter J. Savitch. 1987. Context-Sensitive Grammar and Natural Language Syntax. In Walter J. Savitch et al., editors, *The Formal Complexity of Natural Language*. Dordrecht: D. Reidel.
- Yves Schabes. 1990. *Mathematical and Computational Aspects of Lexicalized Grammars*. PhD thesis, University of Pennsylvania.
- Michael Schiehlen. 1996. Semantic Construction from Parse Forests. In *COLING-96, Copenhagen, August 1996*, pages 907–912.
- Satoshi Sekine. 1996. Modeling Topic Coherence for Speech Recognition. In *COLING-96, Copenhagen, August 1996*, pages 913–918.
- Elisabeth Selkirk. 1984. *Phonology and Syntax: The Relation Between Sound and Structure*. Cambridge, MA: MIT Press.
- Petr Sgall. 1975. Focus and the Question Test. *Folia Linguistica*, 7(3-4):301–305.
- Petr Sgall, Eva Hajičová, and Jarmila Panevova. 1986. *The meaning of the sentence in its semantic and pragmatic aspects*. Dordrecht: D. Reidel.
- Masayoshi Shibatani. 1990. *The Languages of Japan*. Cambridge: Cambridge University Press.

- Stuart M. Shieber. 1986. *An Introduction to Unification-Based Approaches to Grammar*. Stanford, CA: CSLI Publications.
- Mitsuaki Shimojo. 1995. *Focus Structure and Morphosyntax in Japanese: WA and GA, and Word Order Flexibility*. PhD thesis, SUNY Buffalo.
- Ken-ichiro Shirai. 1986. Japanese Noun-phrases and Particles wa and ga. In Jeroen Groenendijk et al., editors, *Studies in Discourse, Representation Theory and the Theory of Generalized Quantifiers*, pages 63–80. Dordrecht: Foris.
- Melanie Siegel. 1999. The Syntactic Processing of Particles in Japanese Spoken Language. In *Proceedings of 13th Pacific Asia Conference on Language, Information, and Computation*.
- Sidney Siegel and N. John Castellan, Jr. 1988. *Nonparametric Statistics for the Behavioral Sciences, 2nd ed.* New York: McGraw-Hill.
- K. Sparck Jones. 1983. So what about parsing compound nouns? In Karen Sparck Jones and Yorick Wilks, editors, *Automatic Natural Language Parsing*, pages 164–168. Chichester, England: Ellis Horwood.
- Richard Sproat, editor. 1998. *Multilingual text-to-speech synthesis: the Bell Labs approach*. Dordrecht: Kluwer.
- Robert Stalnaker. 1978. Assertion. In P. Cole, editor, *Syntax and Semantics, Vol. 9: Pragmatics*, pages 315–322. New York: Academic Press.
- Arnim von Stechow. 1981. Topic, Focus, and Local Relevance. In Wolfgang Klein and Willem J. M. Levelt, editors, *Crossing the Boundaries in Linguistics*, pages 95–130. Dordrecht: D. Reidel.
- Arnim von Stechow. 1991. Focusing and backgrounding operators. In Werner Abraham, editor, *Discourse Particles*, pages 37–84. Amsterdam: John Benjamins.
- Mark J. Steedman. 1985. Dependency and Coordination in the Grammar of Dutch and English. *Language*, 61:523–56.
- Mark J. Steedman. 1988. Combinators and Grammars. In Richard Oehrle, Emmon Bach, and

- Deirdre Wheeler, editors, *Categorial Grammars and Natural Language Structures*, pages 417–442. Dordrecht: D. Reidel.
- Mark J. Steedman. 1990. Gapping As Constituent Coordination. *Linguistics and Philosophy*, 13:207–2.
- Mark Steedman. 1991a. Structure and Intonation. *Language*, 67:260–296.
- Mark Steedman. 1991b. Type-Raising and Directionality in Combinatory Grammar. In *ACL 29, Berkeley, CA, June 1991*, pages 71–78.
- Mark Steedman. 1996. *Surface Structure and Interpretation*. Cambridge, MA: MIT Press.
- Mark Steedman. 1997. Making Use of Intonation in Interactive Dialogue Translation (invited talk). In *IWPT 97, Cambridge, MA, September 1997*, page xix.
- Mark Steedman. 1999. *The Syntactic Process (to appear)*. Cambridge, MA: MIT Press.
- Michael Strube. 1998. Never Look Back: An Alternative to Decentering. In *COLING-ACL 98, Montreal, August 1998*, pages 1251–1257.
- Malgorzata E. Styś and Stefan S. Zemke. 1995. Incorporating Discourse Aspects in English-Polish MT: Towards Robust Implementation. In *Proceedings of Recent Advances in NLP 1995*. Available as cmp-1g/9510006.
- Henriëtte de Swart. 1999. Position and Meaning: Time Adverbials in Context. In Peter Bosch and Rob A. van der Sandt, editors, *Focus: Linguistic, Cognitive, and Computational Perspectives*, pages 336–361. Cambridge: Cambridge University Press.
- Anna Szabolcsi. 1981. Compositionality in Focus. *Folia Linguistica*, XV(1-2):141–161.
- Anna Szabolcsi. 1983a. Focusing Properties, or the Trap of First Order. *Theoretical Linguistics*, 10(2/3):125–145.
- Anna Szabolcsi. 1983b. The Semantics of Topic-Focus Articulation. In et. al J. A. G. Goenendijk, editor, *Formal Methods in the Study of Language*, pages 513–540. Amsterdam: Mathematisch Centrum.
- Hozumi Tanaka and Masahiro Ueki. 1995. Japanese Parsing System using EDR Dictionary. <http://www.icot.or.jp/AITEC/PUBLICATIONS/Itaku/95/catalogue18-E.html>.

- Hozumi Tanaka, Takenobu Tokunaga, and Michio Aizawa. 1993. Integration of Morphological and Syntactic Analysis Based on the LR Parsing Algorithm. In *IWPT 93, Tilburg, August, 1993*.
- Koichi Tateishi. 1994. *The Syntax of 'Subject'*. Stanford, CA: CSLI Publications.
- Hideo Teramura. 1991. *Nihongo-no Sintakusu-to Imi (Japanese Syntax and Meaning), Vol. 3*. Tokyo: Kuroshio Publishers.
- Simon Thompson. 1991. *Type Theory and Functional Programming*. Reading, MA: Addison-Wesley.
- Noriko Fujii Ueno. 1987. Functions of the Theme Marker *Wa* from Synchronic and Diachronic Perspectives. In John Hinds and Shoichi Iwasaki, editors, *Perspectives on Topicalization: The Case of Japanese 'WA'*, pages 221–263. Amsterdam: John Benjamins.
- Yoich Uetake. 1992. Analysis of the Theme and Rheme Structure of a Japanese Sentence. *Lingua Posnaniensis*, 34:125–134.
- Enric Vallduví. 1990. *The informational component*. PhD thesis, University of Pennsylvania.
- Enric Vallduví and Elisabet Engdahl. 1994. Information Packaging and Grammar Architecture. In *NELS 25, Philadelphia, PA, October 1994*, pages 519–533.
- Enric Vallduví and Elisabet Engdahl. 1996. The Linguistic Realization of Information Packaging. *Linguistics*, 34:459–519.
- Enric Vallduví and Maria Vilkuna. 1998. On Rheme and Kontrast. In Peter W. Culicover and Louise McNally, editors, *Syntax and Semantics, Vol. 29: The limits of syntax*, pages 79–108. New York: Academic Press.
- K. Vijay-Shanker. 1988. *A Study of Tree Adjoining Grammars*. PhD thesis, University of Pennsylvania.
- K. Vijay-Shanker and David J. Weir. 1990. Polynomial Time Parsing of Combinatory Categorical Grammars. In *ACL 28, Pittsburgh, PA, June 1990*, pages 1–8.
- K. Vijay-Shanker and David J. Weir. 1993. Parsing Constrained Grammar Formalisms. *Computational Linguistics*, 19(4):591–636.
- K. Vijay-Shanker and D. J. Weir. 1994. The Equivalence of Four Extensions of Context-Free

- Grammars. *Mathematical Systems Theory*, 27:511–546.
- K. Vijay-Shanker, D.J. Weir, and Aravind Joshi. 1986. Tree Adjoining and Head Wrapping. In *COLING-86, Bonn, August 1986*, pages 202–207.
- Marilyn A. Walker. 1992. Redundancy in Collaborative Dialogue. In *COLING-92, Nantes, August 1992*, pages 345–351.
- Gregory L. Ward. 1990. The discourse functions of VP preposing. *Language*, 66:742–763.
- Yasuko Watanabe. 1989. *The Function of “WA” and “GA” in Japanese Discourse*. PhD thesis, University of Oregon.
- Bonnie Lynn Webber. 1983. So What Can We Talk About Now? In M. Brady and R. Berwick, editors, *Computational Models of Discourse*, pages 331–371. Cambridge, MA: MIT Press.
- Bonnie Webber. 1991. Structure and ostension in the interpretation of discourse deixis. *Natural Language and Cognitive Process*, 6(2):107–135.
- Hae-Kyung Wee. 1995. Meaning and Intonation Associated with the Subject Marker and the Topic Marker in Korean. In *Harvard Studies in Korean Linguistics 6*. Cambridge, MA: Harvard University.
- David Weir. 1988. *Characterizing Mildly Context-Sensitive Grammar Formalisms*. PhD thesis, University of Pennsylvania.
- David J. Weir and Aravind K. Joshi. 1988. Combinatory Categorical Grammars: Generative Power and Relationship to Linear Context-Free Rewriting Systems. In *ACL 26, Buffalo, NY, June 1988*, pages 278–285.
- Pete J. Whitelock. 1988. A Feature-Based Categorical Morpho-Syntax for Japanese. In U. Reyle and C. Rohrer, editors, *Natural Language Parsing and Linguistic Theories*, pages 230–261. Dordrecht: Kluwer.
- Susanne Winkler. 1997. *Focus and Secondary Predication*. Berlin: Mouton de Gruyter.
- Terry Winograd. 1972. *Understanding Natural Language*. New York: Academic Press.
- Kent Barrows Wittenburg. 1986. *Natural Language Parsing with Combinatory Categorical Grammar in a Graph-Unification-Based Formalism*. PhD thesis, University of Texas, Austin.

- Kent Wittenburg. 1987. Predictive Combinators: A Method for Efficient Processing of Combinatory Categorical Grammars. In *ACL 25, Stanford, CA, June 1987*.
- Kent Wittenburg and Robert E. Wall. 1991. Parsing with Categorical Grammar in Predictive Normal Form. In Masaru Tomita, editor, *Current Issues in Parsing Technology*, pages 65–83. Dordrecht: Kluwer.
- Mary McGee Wood. 1993. *Categorical Grammars*. London: Routledge.
- Kei Yoshimoto. 1992. “Wa” to “Ga”: Sorezore-no Kinoosuru Reberu-no Tigai-ni Tyuumoku-site (“Wa” and “Ga”: Focusing on their different function levels). *Gengo Kenkyu*, 81:1–17.
- Henk Zeevat. 1988. Combining Categorical Grammar and Unification. In Uwe Reyle and Christian Rohrer, editors, *Natural Language Parsing and Linguistic Theories*, pages 202–229. Dordrecht: D. Reidel.
- Maria Lusa Zubizarreta. 1998. *Prosody, Focus, and Word Order*. Cambridge, MA: MIT Press.

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