Bibliography Misc

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May 15, 2017

References

- [1] Steven Abney, Robert E Schapire, and Yoram Singer. Boosting applied to tagging and pp attachment. In *Proceedings of the Joint SIGDAT Conference on Empirical Methods in Natural Language Processing and Very Large Corpora*, volume 130, pages 132–134, 1999.
- [2] Lasha Abzianidze, Johannes Bjerva, Kilian Evang, Hessel Haagsma, Rik van Noord, Pierre Ludmann, Duc-Duy Nguyen, and Johan Bos. The parallel meaning bank: Towards a multilingual corpus of translations annotated with compositional meaning representations. arXiv preprint arXiv:1702.03964, 2017.
- [3] Palakorn Achananuparp, Xiaohua Hu, and Xiajiong Shen. The evaluation of sentence similarity measures. In *Data warehousing and knowledge discovery*, pages 305–316. Springer, 2008.
- [4] Karteek Addanki and Dekai Wu. Transduction recursive auto-associative memory: Learning bilingual compositional distributed vector representations of inversion transduction grammars. Syntax, Semantics and Structure in Statistical Translation, page 112, 2014.
- [5] Charu C Aggarwal and ChengXiang Zhai. A survey of text clustering algorithms. In *Mining Text Data*, pages 77–128. Springer, 2012.
- [6] Željko Agić, Anders Johannsen, Barbara Plank, Héctor Alonso Martínez, Natalie Schluter, and Anders Søgaard. Multilingual projection for parsing truly low-resource languages. *Transactions of the Association for Computational Linguistics*, 4:301–312, 2016.
- [7] Harsh Agrawal, Arjun Chandrasekaran, Dhruv Batra, Devi Parikh, and Mohit Bansal. Sort story: Sorting jumbled images and captions into stories. arXiv preprint arXiv:1606.07493, 2016.

- [8] Harsh Agrawal, Arjun Chandrasekaran, Dhruv Batra, Devi Parikh, and Mohit Bansal. Sort story: Sorting jumbled images and captions into stories. In *Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing*, pages 925–931, Austin, Texas, November 2016. Association for Computational Linguistics.
- [9] Yafa Al-Raheb. Pragmatic constraints on semantic presupposition. In *Proceedings of the Third Workshop on Constraints and Language Processing*, pages 25–32. Association for Computational Linguistics, 2006.
- [10] Rami Al-Rfou, Vivek Kulkarni, Bryan Perozzi, and Steven Skiena. Polyglot-ner: Massive multilingual named entity recognition. In *Proceedings of the 2015 SIAM International Conference on Data Mining*, pages 586–594. SIAM, 2015.
- [11] Tim Althoff, Kevin Clark, and Jure Leskovec. Large-scale analysis of counseling conversations: An application of natural language processing to mental health. arXiv preprint arXiv:1605.04462, 2016.
- [12] Tim Althoff, Kevin Clark, and Jure Leskovec. Natural language processing for mental health: Large scale discourse analysis of counseling conversations. arXiv preprint arXiv:1605.04462, 2016.
- [13] Tim Althoff, Cristian Danescu-Niculescu-Mizil, and Dan Jurafsky. How to ask for a favor: A case study on the success of altruistic requests. arXiv preprint arXiv:1405.3282, 2014.
- [14] II Alvin Grissom and Yusuke Miyao. Annotating factive verbs.
- [15] Bharat Ram Ambati, Tejaswini Deoskar, and Mark Steedman. Shift-reduce ccg parsing using neural network models. In Proceedings of the 2016 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, pages 447–453, San Diego, California, June 2016. Association for Computational Linguistics.
- [16] Bharat Ram Ambati, Siva Reddy, and Mark Steedman. Assessing relative sentence complexity using an incremental ccg parser. In Proceedings of the 2016 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, pages 1051– 1057, San Diego, California, June 2016. Association for Computational Linguistics.
- [17] Waleed Ammar, George Mulcaire, Miguel Ballesteros, Chris Dyer, and Noah A Smith. Many languages, one parser. CoRR, abs/1602.01595, 2016.
- [18] Waleed Ammar, George Mulcaire, Miguel Ballesteros, Chris Dyer, and Noah A Smith. One parser, many languages. arXiv preprint arXiv:1602.01595, 2016.

- [19] Ronald E Anderson, Deborah G Johnson, Donald Gotterbarn, and Judith Perrolle. Using the new acm code of ethics in decision making. *Communications of the ACM*, 36(2):98–107, 1993.
- [20] Jacob Andreas and Dan Klein. Alignment-based compositional semantics for instruction following. arXiv preprint arXiv:1508.06491, 2015.
- [21] Jacob Andreas, Andreas Vlachos, and Stephen Clark. Semantic parsing as machine translation. In ACL (2), pages 47–52, 2013.
- [22] Nicholas Andrews, Jason Eisner, and Mark Dredze. Name phylogeny: A generative model of string variation. In Proceedings of the 2012 Joint Conference on Empirical Methods in Natural Language Processing and Computational Natural Language Learning, EMNLP-CoNLL '12, pages 344–355, Stroudsburg, PA, USA, 2012. Association for Computational Linguistics.
- [23] Christophe Andrieu, Nando De Freitas, Arnaud Doucet, and Michael I Jordan. An introduction to mcmc for machine learning. *Machine learning*, 50(1-2):5–43, 2003.
- [24] Gabor Angeli, Percy Liang, and Dan Klein. A simple domain-independent probabilistic approach to generation. In *Proceedings of the 2010 Conference on Empirical Methods in Natural Language Processing*, pages 502–512. Association for Computational Linguistics, 2010.
- [25] Gabor Angeli and Christopher D Manning. Philosophers are mortal: Inferring the truth of unseen facts. In *CoNLL*, pages 133–142, 2013.
- [26] Gabor Angeli and Christopher D Manning. Naturalli: Natural logic inference for common sense reasoning. In *EMNLP*, pages 534–545, 2014.
- [27] Gabor Angeli, Neha Nayak, and Christopher D. Manning. Combining natural logic and shallow reasoning for question answering. In *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 442–452, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [28] Gábor György Angeli. Learning Open Domain Knowledge From Text. PhD thesis, STANFORD UNIVERSITY, 2016.
- [29] Giovanni Angelini, Marco Ernandes, and Marco Gori. Webcrow: A webbased crosswords solver. In Mark Maybury, Oliviero Stock, and Wolfgang Wahlster, editors, Intelligent Technologies for Interactive Entertainment, volume 3814 of Lecture Notes in Computer Science, pages 295–298. Springer Berlin Heidelberg, 2005.
- [30] Stanislaw Antol, Aishwarya Agrawal, Jiasen Lu, Margaret Mitchell, Dhruv Batra, C Lawrence Zitnick, and Devi Parikh. Vqa: Visual question answering. In *Proceedings of the IEEE International Conference on Computer Vision*, pages 2425–2433, 2015.

- [31] Sanjeev Arora, Yuanzhi Li, Yingyu Liang, Tengyu Ma, and Andrej Risteski. Linear algebraic structure of word senses, with applications to polysemy. arXiv preprint arXiv:1601.03764, 2016.
- [32] Philip Arthur, Graham Neubig, Sakriani Sakti, Tomoki Toda, and Satoshi Nakamura. Semantic parsing of ambiguous input through paraphrasing and verification. *Transactions of the Association for Computational Linquistics*, 3:571–584, 2015.
- [33] Yoav Artzi, Nicholas FitzGerald, and Luke Zettlemoyer. Semantic parsing with combinatory categorial grammars. In *Proceedings of the 51st Annual Meeting of the Association for Computational Linguistics (Tutorials)*, page 2, Sofia, Bulgaria, August 2013. Association for Computational Linguistics.
- [34] Yoav Artzi, Kenton Lee, and Luke Zettlemoyer. Broad-coverage ccg semantic parsing with amr. In *Proceedings of the 2015 Conference on Empirical Methods in Natural Language Processing*, pages 1699–1710, Lisbon, Portugal, September 2015. Association for Computational Linguistics.
- [35] Yoav Artzi and Luke Zettlemoyer. Weakly supervised learning of semantic parsers for mapping instructions to actions. *Transactions of the Association for Computational Linguistics*, 1:49–62, 2013.
- [36] Ehsaneddin Asgari and Mohammad R. K. Mofrad. Comparing fifty natural languages and twelve genetic languages using word embedding language divergence (WELD) as a quantitative measure of language distance. CoRR, abs/1604.08561, 2016.
- [37] Seyed Ali Bahrainian, Marcus Liwicki, and Andreas Dengel. Fuzzy subjective sentiment phrases: A context sensitive and self-maintaining sentiment lexicon. In Proceedings of the 2014 IEEE/WIC/ACM International Joint Conferences on Web Intelligence (WI) and Intelligent Agent Technologies (IAT)-Volume 01, pages 361–368. IEEE Computer Society, 2014.
- [38] Ondrej Bajgar, Rudolf Kadlec, and Jan Kleindienst. Embracing data abundance: Booktest dataset for reading comprehension. arXiv preprint arXiv:1610.00956, 2016.
- [39] David Bamman, Brendan O'Connor, and Noah A Smith. Learning latent personas of film characters. In *Proceedings of the Annual Meeting of the Association for Computational Linguistics (ACL)*, page 352, 2014.
- [40] David Bamman and Noah A Smith. Unsupervised discovery of biographical structure from text. *Transactions of the Association for Computational Linguistics*, 2:363–376, 2014.
- [41] Laura Banarescu, Claire Bonial, Shu Cai, Madalina Georgescu, Kira Griffitt, Ulf Hermjakob, Kevin Knight, Philipp Koehn, Martha Palmer, and

- Nathan Schneider. Abstract meaning representation for sembanking. In *Proceedings of the 7th Linguistic Annotation Workshop and Interoperability with Discourse*, pages 178–186, Sofia, Bulgaria, August 2013. Association for Computational Linguistics.
- [42] Mohit Bansal, John Denero, and Dekang Lin. Unsupervised translation sense clustering. In Proceedings of the 2012 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, NAACL HLT '12, pages 773–782, Stroudsburg, PA, USA, 2012. Association for Computational Linguistics.
- [43] Mohit Bansal, Kevin Gimpel, and Karen Livescu. Tailoring continuous word representations for dependency parsing. In *Proceedings of the 52nd Annual Meeting of the Association for Computational Linguistics (Volume 2: Short Papers)*, pages 809–815, Baltimore, Maryland, June 2014. Association for Computational Linguistics.
- [44] Khaled Baqer and Ross Anderson. Do you believe in tinker bell? the social externalities of trust. In Security Protocols XXIII, pages 224–236. Springer, 2015.
- [45] Roy Bar-Haim, Ido Dagan, and Jonathan Berant. Knowledge-based textual inference via parse-tree transformations. *J. Artif. Intell. Res. (JAIR)*, 54:1–57, 2015.
- [46] Roy Bar-Haim, Ido Dagan, and Jonathan Berant. Knowledge-based textual inference via parse-tree transformations. *Journal of Artificial Intelligence Research*, 54:1–57, 2015.
- [47] Gianni Barlacchi, Massimo Nicosia, and Alessandro Moschitti. Sacry: Syntax-based automatic crossword puzzle resolution system. ACL-IJCNLP 2015, page 79, 2015.
- [48] Marco Baroni, Georgiana Dinu, and Germán Kruszewski. Don't count, predict! a systematic comparison of context-counting vs. context-predicting semantic vectors. In *ACL* (1), pages 238–247, 2014.
- [49] Regina Barzilay and Mirella Lapata. Modeling local coherence: An entity-based approach. *Computational Linguistics*, 34(1):1–34, 2008.
- [50] Regina Barzilay and Lillian Lee. Learning to paraphrase: An unsupervised approach using multiple-sequence alignment. In Proceedings of the 2003 Conference of the North American Chapter of the Association for Computational Linguistics on Human Language Technology Volume 1, NAACL '03, pages 16–23, Stroudsburg, PA, USA, 2003. Association for Computational Linguistics.
- [51] Regina Barzilay and Lillian Lee. Learning to paraphrase: an unsupervised approach using multiple-sequence alignment. In *Proceedings of the 2003*

- Conference of the North American Chapter of the Association for Computational Linguistics on Human Language Technology-Volume 1, pages 16–23. Association for Computational Linguistics, 2003.
- [52] Osman Başkaya and David Jurgens. Semi-supervised learning with induced word senses for state of the art word sense disambiguation. *Journal of Artificial Intelligence Research*, 55:1025–1058, 2016.
- [53] Petr Baudiš and Jan Šedivỳ. Sentence pair scoring: Towards unified framework for text comprehension. arXiv preprint arXiv:1603.06127, 2016.
- [54] Sandro Bauer and Simone Teufel. Unsupervised timeline generation for wikipedia history articles. In *Proceedings of the 2016 Conference on Em*pirical Methods in Natural Language Processing, pages 2343–2349, Austin, Texas, November 2016. Association for Computational Linguistics.
- [55] Daniel Beck, Trevor Cohn, Christian Hardmeier, and Lucia Specia. Learning structural kernels for natural language processing. arXiv preprint arXiv:1508.02131, 2015.
- [56] David Belanger and Sham Kakade. A linear dynamical system model for text. In David Blei and Francis Bach, editors, Proceedings of the 32nd International Conference on Machine Learning (ICML-15), pages 833– 842. JMLR Workshop and Conference Proceedings, 2015.
- [57] Islam Beltagy, Katrin Erk, and Raymond J Mooney. Probabilistic soft logic for semantic textual similarity. In ACL (1), pages 1210–1219, 2014.
- [58] Emily M Bender. Linguistically naïve!= language independent: why nlp needs linguistic typology. In *Proceedings of the EACL 2009 Workshop on the Interaction between Linguistics and Computational Linguistics: Virtuous, Vicious or Vacuous?*, pages 26–32. Association for Computational Linguistics, 2009.
- [59] Eric Bengtson and Dan Roth. Understanding the value of features for coreference resolution. In *Proceedings of the Conference on Empirical Methods in Natural Language Processing*, pages 294–303. Association for Computational Linguistics, 2008.
- [60] Charles Bennett, Ming Li, and Bin Ma. Linking chain letters. *Sci. Amer*, pages 77–81, 2003.
- [61] Luisa Bentivogli, Raffaella Bernardi, Marco Marelli, Stefano Menini, Marco Baroni, and Roberto Zamparelli. Sick through the semeval glasses.
- [62] Jonathan Berant, Noga Alon, Ido Dagan, and Jacob Goldberger. Efficient global learning of entailment graphs. *Computational Linguistics*, 2015.
- [63] Jonathan Berant, Andrew Chou, Roy Frostig, and Percy Liang. Semantic parsing on freebase from question-answer pairs. In EMNLP, volume 2, page 6, 2013.

- [64] Jonathan Berant and Percy Liang. Semantic parsing via paraphrasing. In Proceedings of ACL, volume 7, page 92, 2014.
- [65] Jonathan Berant and Percy Liang. Imitation learning of agenda-based semantic parsers. Transactions of the Association for Computational Linguistics, 3:545–558, 2015.
- [66] Jonathan Berant, Vivek Srikumar, Pei-Chun Chen, Abby Vander Linden, Brittany Harding, Brad Huang, Peter Clark, and Christopher D Manning. Modeling biological processes for reading comprehension. In EMNLP, 2014.
- [67] Taylor Berg-Kirkpatrick, Alexandre Bouchard-Côté, John DeNero, and Dan Klein. Painless unsupervised learning with features. In *Human Lan-guage Technologies: The 2010 Annual Conference of the North American Chapter of the Association for Computational Linguistics*, HLT '10, pages 582–590, Stroudsburg, PA, USA, 2010. Association for Computational Linguistics.
- [68] Taylor Berg-Kirkpatrick, Alexandre Bouchard-Côté, John DeNero, and Dan Klein. Painless unsupervised learning with features. In *Human Lan-guage Technologies: The 2010 Annual Conference of the North American Chapter of the Association for Computational Linguistics*, pages 582–590. Association for Computational Linguistics, 2010.
- [69] Adam L Berger, Vincent J Della Pietra, and Stephen A Della Pietra. A maximum entropy approach to natural language processing. Computational linguistics, 22(1):39–71, 1996.
- [70] Raffaella Bernardi, Ruket Cakici, Desmond Elliott, Aykut Erdem, Erkut Erdem, Nazli Ikizler-Cinbis, Frank Keller, Adrian Muscat, and Barbara Plank. Automatic description generation from images: A survey of models, datasets, and evaluation measures. CoRR, abs/1601.03896, 2016.
- [71] Raffaella Bernardi, Ruket Cakici, Desmond Elliott, Aykut Erdem, Erkut Erdem, Nazli Ikizler-Cinbis, Frank Keller, Adrian Muscat, and Barbara Plank. Automatic description generation from images: A survey of models, datasets, and evaluation measures. arXiv preprint arXiv:1601.03896, 2016.
- [72] Michael S. Bernstein, Adam Marcus, David R. Karger, and Robert C. Miller. Enhancing directed content sharing on the web. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, CHI '10, pages 971–980, New York, NY, USA, 2010. ACM.
- [73] Yevgeni Berzak, Yan Huang, Andrei Barbu, Anna Korhonen, and Boris Katz. Bias and agreement in syntactic annotations. arXiv preprint arXiv:1605.04481, 2016.

- [74] Yevgeni Berzak, Jessica Kenney, Carolyn Spadine, Jing Xian Wang, Lucia Lam, Keiko Sophie Mori, Sebastian Garza, and Boris Katz. Universal dependencies for learner english. arXiv preprint arXiv:1605.04278, 2016.
- [75] Parminder Bhatia, Yangfeng Ji, and Jacob Eisenstein. Better document-level sentiment analysis from RST discourse parsing. CoRR, abs/1509.01599, 2015.
- [76] Nikita Bhutani, H V Jagadish, and Dragomir Radev. Nested propositions in open information extraction. In Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing, pages 55–64, Austin, Texas, November 2016. Association for Computational Linguistics.
- [77] Nikita Bhutani, HV Jagadish, and Dragomir Radev. Nested propositions in open information extraction.
- [78] Arianna Bisazza and Marcello Federico. A survey of word reordering in statistical machine translation: Computational models and language phenomena. *Computational Linguistics*, 2016.
- [79] David M Blei. Probabilistic topic models. Communications of the ACM, 55(4):77–84, 2012.
- [80] David M Blei and John D Lafferty. Topic models. Text mining: classification, clustering, and applications, 10(71):34, 2009.
- [81] David M Blei, Andrew Y Ng, and Michael I Jordan. Latent dirichlet allocation. *Journal of machine Learning research*, 3(Jan):993–1022, 2003.
- [82] Bernd Bohnet, Ryan McDonald, Emily Pitler, and Ji Ma. Generalized transition-based dependency parsing via control parameters. In *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 150–160, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [83] Antoine Bordes, Nicolas Usunier, Sumit Chopra, and Jason Weston. Large-scale simple question answering with memory networks. arXiv preprint arXiv:1506.02075, 2015.
- [84] Johan Bos. Implementing the binding and accommodation theory for anaphora resolution and presupposition projection. *Computational Linquistics*, 29(2):179–210, 2003.
- [85] Johan Bos. Wide-coverage semantic analysis with boxer. In Proceedings of the 2008 Conference on Semantics in Text Processing, pages 277–286. Association for Computational Linguistics, 2008.
- [86] Peter Bosch. Against the identification of anaphora and presupposition. In *Proceedings of the Second SIGdial Workshop on Discourse and Dialogue-Volume 16*, pages 1–4. Association for Computational Linguistics, 2001.

- [87] Jan A. Botha and Phil Blunsom. Compositional morphology for word representations and language modelling. *CoRR*, abs/1405.4273, 2014.
- [88] Guillaume Bouchard, Pontus Stenetorp, and Sebastian Riedel. Learning to generate textual data. In *Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing*, pages 1608–1616, Austin, Texas, November 2016. Association for Computational Linguistics.
- [89] Claudio Delli Bovi, Luca Telesca, and Roberto Navigli. Large-scale information extraction from textual definitions through deep syntactic and semantic analysis. Transactions of the Association for Computational Linguistics, 3:529–543, 2015.
- [90] Samuel R Bowman, Gabor Angeli, Christopher Potts, and Christopher D Manning. A large annotated corpus for learning natural language inference. arXiv preprint arXiv:1508.05326, 2015.
- [91] Samuel R Bowman, Jon Gauthier, Abhinav Rastogi, Raghav Gupta, Christopher D Manning, and Christopher Potts. A fast unified model for parsing and sentence understanding. arXiv preprint arXiv:1603.06021, 2016.
- [92] Samuel R. Bowman, Jon Gauthier, Abhinav Rastogi, Raghav Gupta, Christopher D. Manning, and Christopher Potts. A fast unified model for parsing and sentence understanding. In Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers), pages 1466–1477, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [93] Thorsten Brants, Ashok C Popat, Peng Xu, Franz J Och, and Jeffrey Dean. Large language models in machine translation. In In Proceedings of the Joint Conference on Empirical Methods in Natural Language Processing and Computational Natural Language Learning. Citeseer, 2007.
- [94] Eric Brill. A simple rule-based part of speech tagger. In Proceedings of the workshop on Speech and Natural Language, pages 112–116. Association for Computational Linguistics, 1992.
- [95] Peter F Brown, Vincent J Della Pietra, Stephen A Della Pietra, and Robert L Mercer. The mathematics of statistical machine translation: Parameter estimation. *Computational linguistics*, 19(2):263–311, 1993.
- [96] Elia Bruni, Nam Khanh Tran, and Marco Baroni. Multimodal distributional semantics. J. Artif. Int. Res., 49(1):1–47, January 2014.
- [97] B.G. Buchanan, J. Eckroth, and R.G. Smith. A virtual archive for the history of ai. 34:86–98, 2013.

- [98] Matthew Burgess, Eugenia Giraudy, and Eytan Adar. Prototype synthesis for model laws. In *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 1579–1588, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [99] Jan Buys and Phil Blunsom. A bayesian model for generative transition-based dependency parsing. CoRR, abs/1506.04334, 2015.
- [100] Aylin Caliskan, Joanna J Bryson, and Arvind Narayanan. Semantics derived automatically from language corpora contain human-like biases. Science, 356(6334):183–186, 2017.
- [101] Liangliang Cao and Chang Wang. Practice in synonym extraction at large scale. *CoRR*, abs/1412.2197, 2014.
- [102] Lynn Carlson and Daniel Marcu. Discourse tagging reference manual.
- [103] Xavier Carreras and Lluís Màrquez. Introduction to the conll-2005 shared task: Semantic role labeling. In *Proceedings of the Ninth Conference on Computational Natural Language Learning*, pages 152–164. Association for Computational Linguistics, 2005.
- [104] Arun Chaganty and Percy Liang. How much is 131 million dollars? putting numbers in perspective with compositional descriptions. In Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers), pages 578–587, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [105] Tanmoy Chakraborty and Ramasuri Narayanam. All fingers are not equal: Intensity of references in scientific articles. In *Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing*, pages 1348–1358, Austin, Texas, November 2016. Association for Computational Linguistics.
- [106] Arjun Chandrasekaran, Devi Parikh, and Mohit Bansal. Punny captions: Witty wordplay in image descriptions. arXiv preprint arXiv:1704.08224, 2017.
- [107] Arjun Chandrasekaran, Ashwin K Vijayakumar, Stanislaw Antol, Mohit Bansal, Dhruv Batra, C Lawrence Zitnick, and Devi Parikh. We are humor beings: Understanding and predicting visual humor. In *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition*, pages 4603–4612, 2016.
- [108] Arjun Chandrasekaran, Ashwin K. Vijayakumar, Stanislaw Antol, Mohit Bansal, Dhruv Batra, C. Lawrence Zitnick, and Devi Parikh. We are humor beings: Understanding and predicting visual humor. *CoRR*, abs/1512.04407, 2015.

- [109] Allison Chaney, Hanna Wallach, Matthew Connelly, and David Blei. Detecting and characterizing events. In Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing, pages 1142–1152, Austin, Texas, November 2016. Association for Computational Linguistics
- [110] Angel Chang, Will Monroe, Manolis Savva, Christopher Potts, and Christopher D. Manning. Text to 3d scene generation with rich lexical grounding. In *Proceedings of the 53rd Annual Meeting of the Association for Computational Linguistics and the 7th International Joint Conference on Natural Language Processing (Volume 1: Long Papers)*, pages 53–62, Beijing, China, July 2015. Association for Computational Linguistics.
- [111] Ching-Yun Chang and Stephen Clark. Practical linguistic steganography using contextual synonym substitution and a novel vertex coding method. *Computational Linguistics*, 40(2):403–448, 2014.
- [112] Jonathan Chang, Sean Gerrish, Chong Wang, Jordan L Boyd-Graber, and David M Blei. Reading tea leaves: How humans interpret topic models. In Advances in neural information processing systems, pages 288–296, 2009.
- [113] Kai-Wei Chang, He He, Hal Daumé III, and John Langford. Learning to search for dependencies. CoRR, abs/1503.05615, 2015.
- [114] Laurent Charlin and Richard S Zemel. The toronto paper matching system: an automated paper-reviewer assignment system. In *International Conference on Machine Learning (ICML)*, 2013.
- [115] Eugene Charniak, Sharon Goldwater, and Mark Johnson. Edge-based best-first chart parsing. In *Proceedings of the sixth workshop on very large corpora*, pages 127–133. Citeseer, 1998.
- [116] Eugene Charniak and Mark Johnson. Coarse-to-fine n-best parsing and maxent discriminative reranking. In Proceedings of the 43rd Annual Meeting on Association for Computational Linguistics, pages 173–180. Association for Computational Linguistics, 2005.
- [117] Kamalika Chaudhuri, Sham M. Kakade, Karen Livescu, and Karthik Sridharan. Multi-view clustering via canonical correlation analysis. In *Proceedings of the 26th Annual International Conference on Machine Learning*, ICML '09, pages 129–136, New York, NY, USA, 2009. ACM.
- [118] Bo Chen, Le Sun, Xianpei Han, and Bo An. Sentence rewriting for semantic parsing. In *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 766–777, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [119] Danqi Chen, Jason Bolton, and Christopher D. Manning. A thorough examination of the cnn/daily mail reading comprehension task. In *Proceedings of the 54th Annual Meeting of the Association for Computational*

- Linguistics (Volume 1: Long Papers), pages 2358–2367, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [120] Danqi Chen, Jason Bolton, and Christopher D Manning. A thorough examination of the cnn/daily mail reading comprehension task. arXiv preprint arXiv:1606.02858, 2016.
- [121] Ruey-Cheng Chen, Reid Swanson, and Andrew S Gordon. An adaptation of topic modeling to sentences, 2010.
- [122] Xinlei Chen, Hao Fang, Tsung-Yi Lin, Ramakrishna Vedantam, Saurabh Gupta, Piotr Dollár, and C. Lawrence Zitnick. Microsoft COCO captions: Data collection and evaluation server. *CoRR*, abs/1504.00325, 2015.
- [123] Yun-Nung Chen, Jeffrey P Bigham, et al. Real-time on-demand crowd-powered entity extraction. arXiv preprint arXiv:1704.03627, 2017.
- [124] Zhiyuan Chen and Bing Liu. Lifelong machine learning.
- [125] Wei-Chen Cheng, Stanley Kok, Hoai Vu Pham, Hai Leong Chieu, and Kian Ming A Chai. Language modeling with sum-product networks. In Proceedings of Interspeech, 2014.
- [126] Jackie Chi Kit Cheung, Hoifung Poon, and Lucy Vanderwende. Probabilistic frame induction. *CoRR*, abs/1302.4813, 2013.
- [127] David Chiang. Hierarchical phrase-based translation. Comput. Linguist., 33(2):201-228, June 2007.
- [128] David Chiang. Hierarchical phrase-based translation. computational linguistics, 33(2):201–228, 2007.
- [129] Lydia B Chilton, James A Landay, and Daniel S Weld. Humortools: A microtask workflow for writing news satire.
- [130] Timothy Chklovski and Patrick Pantel. Verbocean: Mining the web for fine-grained semantic verb relations. In *EMNLP*, volume 4, pages 33–40, 2004.
- [131] Do Kook Choe and Eugene Charniak. Parsing as language modeling. In *Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing*, pages 2331–2336, Austin, Texas, November 2016. Association for Computational Linguistics.
- [132] Jinho D Choi, Joel Tetreault, and Amanda Stent. It depends: Dependency parser comparison using a web-based evaluation tool. In *Proceedings of the 53rd Annual Meeting of the Association for Computational Linguistics and the 7th International Joint Conference on Natural Language Processing of the Asian Federation of Natural Language Processing, ACL*, pages 26–31, 2015.

- [133] Grzegorz Chrupała, Ákos Kádár, and Afra Alishahi. Learning language through pictures. In Proceedings of the 53rd Annual Meeting of the Association for Computational Linguistics and the 7th International Joint Conference on Natural Language Processing (Volume 2: Short Papers), pages 112–118, Beijing, China, July 2015. Association for Computational Linguistics.
- [134] Chenhui Chu and Sadao Kurohashi. Supervised syntax-based alignment between english sentences and abstract meaning representation graphs. arXiv preprint arXiv:1606.02126, 2016.
- [135] Alexander Clark. Learning trees from strings: A strong learning algorithm for some context-free grammars. *J. Mach. Learn. Res.*, 14(1):3537–3559, December 2013.
- [136] Christopher Clark and Santosh Divvala. Looking beyond text: Extracting figures, tables and captions from computer science papers. In Workshops at the Twenty-Ninth AAAI Conference on Artificial Intelligence, 2015.
- [137] Peter Clark, Oren Etzioni, Tushar Khot, Ashish Sabharwal, Oyvind Tafjord, Peter Turney, and Daniel Khashabi. Combining retrieval, statistics, and inference to answer elementary science questions. 30th AAAI, 2016.
- [138] David Clausen and Christopher D Manning. Presupposed content and entailments in natural language inference. In *Proceedings of the 2009 Workshop on Applied Textual Inference*, pages 70–73. Association for Computational Linguistics, 2009.
- [139] Anne Cocos and Chris Callison-Burch. Clustering paraphrases by word sense. In *Proceedings of the 2016 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies*, pages 1463–1472, San Diego, California, June 2016. Association for Computational Linguistics.
- [140] Shay B Cohen, Giorgio Satta, and Michael Collins. Approximate pcfg parsing using tensor decomposition. In *HLT-NAACL*, pages 487–496, 2013.
- [141] Reed Coke, Ben King, and Dragomir Radev. Classifying syntactic regularities for hundreds of languages. arXiv preprint arXiv:1603.08016, 2016.
- [142] Michael Collins. Discriminative training methods for hidden markov models: Theory and experiments with perceptron algorithms. In *Proceedings of the ACL-02 conference on Empirical methods in natural language processing-Volume 10*, pages 1–8. Association for Computational Linguistics, 2002.
- [143] Michael Collins. Head-driven statistical models for natural language parsing. *Computational linguistics*, 29(4):589–637, 2003.

- [144] Michael Collins. Lexicalized probabilistic context-free grammars. *Lecture Notes*, 2013.
- [145] Michael Collins and James Brooks. Prepositional phrase attachment through a backed-off model. arXiv preprint cmp-lg/9506021, 1995.
- [146] Michael Collins, Philipp Koehn, and Ivona Kučerová. Clause restructuring for statistical machine translation. In *Proceedings of the 43rd Annual Meeting on Association for Computational Linguistics*, ACL '05, pages 531–540, Stroudsburg, PA, USA, 2005. Association for Computational Linguistics.
- [147] Michael Collins and Terry Koo. Discriminative reranking for natural language parsing. *Computational Linguistics*, 31(1):25–70, 2005.
- [148] Michael Collins and Yoram Singer. Unsupervised models for named entity classification. In *Proceedings of the joint SIGDAT conference on empirical methods in natural language processing and very large corpora*, pages 100–110. Citeseer, 1999.
- [149] Matthieu Constant and Joakim Nivre. A transition-based system for joint lexical and syntactic analysis. In Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers), pages 161–171, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [150] Gabriel Stanovsky Meni Adler Ido Dagan. Specifying and annotating reduced argument span via qa-srl. In *The 54th Annual Meeting of the Association for Computational Linguistics*, page 474, 2016.
- [151] Marco Damonte, Shay B. Cohen, and Giorgio Satta. An incremental parser for abstract meaning representation. *CoRR*, abs/1608.06111, 2016.
- [152] Cristian Danescu-Niculescu-Mizil, Robert West, Dan Jurafsky, Jure Leskovec, and Christopher Potts. No country for old members: User lifecycle and linguistic change in online communities. In *Proceedings of* the 22nd international conference on World Wide Web, pages 307–318. ACM, 2013.
- [153] Kushal Dave, Steve Lawrence, and David M Pennock. Mining the peanut gallery: Opinion extraction and semantic classification of product reviews. In *Proceedings of the 12th international conference on World Wide Web*, pages 519–528. ACM, 2003.
- [154] Jules Davidoff, Ian Davies, and Debi Roberson. Colour categories in a stone-age tribe. *Nature*, 398(6724):203–204, 1999.
- [155] Cedric De Boom, Steven Van Canneyt, Steven Bohez, Thomas Demeester, and Bart Dhoedt. Learning semantic similarity for very short texts. arXiv preprint arXiv:1512.00765, 2015.

- [156] Daniël de Kok and Erhard Hinrichs. Transition-based dependency parsing with topological fields. In *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 2: Short Papers)*, pages 1–7, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [157] Marie-Catherine De Marneffe, Marta Recasens, and Christopher Potts. Modeling the lifespan of discourse entities with application to coreference resolution. *Journal of Artificial Intelligence Research*, 52:445–475, 2015.
- [158] Renato De Mori, Frédéric Bechet, Dilek Hakkani-Tur, Michael McTear, Giuseppe Riccardi, and Gokhan Tur. Spoken language understanding. IEEE Signal Processing Magazine, 25(3):50–58, 2008.
- [159] Janez Demšar, Tomaž Curk, Aleš Erjavec, Črt Gorup, Tomaž Hočevar, Mitar Milutinovič, Martin Možina, Matija Polajnar, Marko Toplak, Anže Starič, Miha Štajdohar, Lan Umek, Lan Žagar, Jure Žbontar, Marinka Žitnik, and Blaž Zupan. Orange: Data mining toolbox in python. Journal of Machine Learning Research, 14:2349–2353, 2013.
- [160] Steve DeNeefe, Kevin Knight, Wei Wang, and Daniel Marcu. What can syntax-based mt learn from phrase-based mt? In EMNLP-CoNLL, pages 755–763, 2007.
- [161] Jacob Devlin, Hao Cheng, Hao Fang, Saurabh Gupta, Li Deng, Xiaodong He, Geoffrey Zweig, and Margaret Mitchell. Language models for image captioning: The quirks and what works. *CoRR*, abs/1505.01809, 2015.
- [162] Paramveer Dhillon, Dean P Foster, and Lyle H Ungar. Multi-view learning of word embeddings via cca. In Advances in Neural Information Processing Systems, pages 199–207, 2011.
- [163] Bhuwan Dhingra, Lihong Li, Xiujun Li, Jianfeng Gao, Yun-Nung Chen, Faisal Ahmed, and Li Deng. End-to-end reinforcement learning of dialogue agents for information access. CoRR, abs/1609.00777, 2016.
- [164] Chris Ding, Tao Li, and Michael I Jordan. Convex and semi-nonnegative matrix factorizations. *Pattern Analysis and Machine Intelligence*, *IEEE Transactions on*, 32(1):45–55, 2010.
- [165] Pedro Domingos. A few useful things to know about machine learning. Communications of the ACM, 55(10):78–87, 2012.
- [166] Daxiang Dong, Hua Wu, Wei He, Dianhai Yu, and Haifeng Wang. Multitask learning for multiple language translation. In Proceedings of the 53rd Annual Meeting of the ACL and the 7th International Joint Conference on Natural Language Processing, pages 1723–1732, 2015.

- [167] Xin Dong, Evgeniy Gabrilovich, Geremy Heitz, Wilko Horn, Ni Lao, Kevin Murphy, Thomas Strohmann, Shaohua Sun, and Wei Zhang. Knowledge vault: A web-scale approach to probabilistic knowledge fusion. In Proceedings of the 20th ACM SIGKDD international conference on Knowledge discovery and data mining, pages 601–610. ACM, 2014.
- [168] Stijn Marinus Van Dongen. *Graph clustering by flow simulation*. PhD thesis, University of Utrecht, 2001.
- [169] Cicero Nogueira dos Santos. Think positive: Towards twitter sentiment analysis from scratch. SemEval 2014, page 647, 2014.
- [170] Matthew Dunn, Levent Sagun, Mike Higgins, Ugur Guney, Volkan Cirik, and Kyunghyun Cho. Searchqa: A new q&a dataset augmented with context from a search engine. arXiv preprint arXiv:1704.05179, 2017.
- [171] Nadir Durrani, Helmut Schmid, Alexander Fraser, Philipp Koehn, and Hinrich Schütze. The operation sequence modelcombining n-gram-based and phrase-based statistical machine translation. *Computational Linguis*tics, 2015.
- [172] Greg Durrett and Dan Klein. A joint model for entity analysis: Coreference, typing, and linking. *Transactions of the Association for Computational Linguistics*, 2:477–490, 2014.
- [173] Cynthia Dwork, Aaron Roth, et al. The algorithmic foundations of differential privacy. Foundations and Trends in Theoretical Computer Science, 9(3-4):211–407, 2014.
- [174] Abdessamad Echihabi and Daniel Marcu. A noisy-channel approach to question answering. In *Proceedings of the 41st Annual Meeting on Association for Computational Linguistics Volume 1*, ACL '03, pages 16–23, Stroudsburg, PA, USA, 2003. Association for Computational Linguistics.
- [175] Koji Eguchi and Victor Lavrenko. Sentiment retrieval using generative models. In *Proceedings of the 2006 conference on empirical methods in natural language processing*, pages 345–354. Association for Computational Linguistics, 2006.
- [176] Desmond Elliott, Stella Frank, Khalil Sima'an, and Lucia Specia. Multi30k: Multilingual english-german image descriptions. CoRR, abs/1605.00459, 2016.
- [177] David K Elson. Modeling narrative discourse. PhD thesis, Citeseer, 2012.
- [178] Güneş Erkan. Language model-based document clustering using random walks. In *Proceedings of the main conference on human language technology conference of the north American chapter of the association of computational linguistics*, pages 479–486. Association for Computational Linguistics, 2006.

- [179] Marco Ernandes, Giovanni Angelini, and Marco Gori. Webcrow: A webbased system for crossword solving. In AAAI, pages 1412–1417, 2005.
- [180] Anthony Fader, Luke Zettlemoyer, and Oren Etzioni. Paraphrase-driven learning for open question answering. In *Proceedings of the 51st Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 1608–1618, Sofia, Bulgaria, August 2013. Association for Computational Linguistics.
- [181] Anthony Fader, Luke S Zettlemoyer, and Oren Etzioni. Paraphrase-driven learning for open question answering. In *ACL* (1), pages 1608–1618. Citeseer, 2013.
- [182] Manaal Faruqui, Jesse Dodge, Sujay Kumar Jauhar, Chris Dyer, Eduard H. Hovy, and Noah A. Smith. Retrofitting word vectors to semantic lexicons. *CoRR*, abs/1411.4166, 2014.
- [183] Manaal Faruqui and Chris Dyer. Improving vector space word representations using multilingual correlation. In Association for Computational Linguistics, 2014.
- [184] Manaal Faruqui and Shankar Kumar. Multilingual open relation extraction using cross-lingual projection. In *Proceedings of the 2015 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies*, pages 1351–1356, Denver, Colorado, May–June 2015. Association for Computational Linguistics.
- [185] Manaal Faruqui and Shankar Kumar. Multilingual open relation extraction using cross-lingual projection. arXiv preprint arXiv:1503.06450, 2015.
- [186] Manaal Faruqui, Ryan McDonald, and Radu Soricut. Morpho-syntactic lexicon generation using graph-based semi-supervised learning. arXiv preprint arXiv:1512.05030, 2015.
- [187] Manaal Faruqui, Yulia Tsvetkov, Graham Neubig, and Chris Dyer. Morphological inflection generation using character sequence to sequence learning. In Proceedings of the 2016 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, pages 634–643, San Diego, California, June 2016. Association for Computational Linguistics.
- [188] Ethan Fast, Binbin Chen, and Michael Bernstein. Empath: Understanding topic signals in large-scale text. arXiv preprint arXiv:1602.06979, 2016.
- [189] Parvin Sadat Feizabadi and Sebastian Padó. Crowdsourcing annotation of non-local semantic roles. In *EACL*, pages 226–230, 2014.

- [190] Paul Felt, Kevin Black, Eric Ringger, Kevin Seppi, and Robbie Haertel. Early gains matter: A case for preferring generative over discriminative crowdsourcing models. In *Proceedings of the 2015 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies*, pages 882–891, Denver, Colorado, May–June 2015. Association for Computational Linguistics.
- [191] Francis Ferraro, Nasrin Mostafazadeh, Ting-Hao Huang, Lucy Vanderwende, Jacob Devlin, Michel Galley, and Margaret Mitchell. A survey of current datasets for vision and language research. In *Proceedings of the 2015 Conference on Empirical Methods in Natural Language Processing*, pages 207–213, Lisbon, Portugal, September 2015. Association for Computational Linguistics.
- [192] Simone Filice and Alessandro Moschitti. Learning to recognize ancillary information for automatic paraphrase identification. In *Proceedings of the 2016 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies*, pages 1109–1114, San Diego, California, June 2016. Association for Computational Linguistics.
- [193] Catherine Finegan-Dollak, Reed Coke, Rui Zhang, Xiangyi Ye, and Dragomir Radev. Effects of creativity and cluster tightness on short text clustering performance.
- [194] Catherine Finegan-Dollak, Reed Coke, Rui Zhang, Xiangyi Ye, and Dragomir Radev. Effects of creativity and cluster tightness on short text clustering performance. In *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 654–665, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [195] Jeffrey Flanigan, Chris Dyer, Noah A Smith, and Jaime Carbonell. Cmu at semeval-2016 task 8: Graph-based amr parsing with infinite ramp loss. *Proceedings of SemEval*, pages 1202–1206, 2016.
- [196] Jeffrey Flanigan, Chris Dyer, Noah A. Smith, and Jaime Carbonell. Generation from abstract meaning representation using tree transducers. In Proceedings of the 2016 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, pages 731–739, San Diego, California, June 2016. Association for Computational Linguistics.
- [197] Jeffrey Flanigan, Sam Thomson, Jaime G Carbonell, Chris Dyer, and Noah A Smith. A discriminative graph-based parser for the abstract meaning representation. 2014.
- [198] Ruth Fong, Walter Scheirer, and David Cox. Using human brain activity to guide machine learning. arXiv preprint arXiv:1703.05463, 2017.

- [199] Mikel L Forcada and Ramón P Ñeco. Recursive hetero-associative memories for translation. In *International Work-Conference on Artificial Neural Networks*, pages 453–462. Springer, 1997.
- [200] Matthew Francis-Landau, Greg Durrett, and Dan Klein. Capturing semantic similarity for entity linking with convolutional neural networks. In Proceedings of the 2016 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, pages 1256–1261, San Diego, California, June 2016. Association for Computational Linguistics.
- [201] Lea Frermann and Mirella Lapata. A bayesian model of diachronic meaning change. Transactions of the Association for Computational Linguistics, 4:31–45, 2016.
- [202] Alona Fyshe, Leila Wehbe, Partha P Talukdar, Brian Murphy, and Tom M Mitchell. A compositional and interpretable semantic space. *Proceedings* of the NAACL-HLT, Denver, USA, 2015.
- [203] Sean Gallagher, Wlodek Zadrozny, Walid Shalaby, and Adarsh Avadhani. Watsonsim: Overview of a question answering engine. CoRR, abs/1412.0879, 2014.
- [204] Michel Galley, Mark Hopkins, Kevin Knight, and Daniel Marcu. What's in a translation rule. Technical report, DTIC Document, 2004.
- [205] Matt Gardner and Jayant Krishnamurthy. Open-vocabulary semantic parsing with both distributional statistics and formal knowledge. arXiv preprint arXiv:1607.03542, 2016.
- [206] Albert Gatt and Ehud Reiter. Simplenlg: A realisation engine for practical applications. In *Proceedings of the 12th European Workshop on Natural Language Generation*, ENLG '09, pages 90–93, Stroudsburg, PA, USA, 2009. Association for Computational Linguistics.
- [207] Leon A Gatys, Alexander S Ecker, and Matthias Bethge. A neural algorithm of artistic style. arXiv preprint arXiv:1508.06576, 2015.
- [208] Jean Mark Gawron. Improving sparse word similarity models with asymmetric measures. In ACL (2), pages 296–301, 2014.
- [209] Donald Geman, Stuart Geman, Neil Hallonquist, and Laurent Younes. Visual turing test for computer vision systems. Proceedings of the National Academy of Sciences, 112(12):3618–3623, 2015.
- [210] Daniela Gerz, Ivan Vulić, Felix Hill, Roi Reichart, and Anna Korhonen. Simverb-3500: A large-scale evaluation set of verb similarity. arXiv preprint arXiv:1608.00869, 2016.

- [211] Daniela Gerz, Ivan Vulić, Felix Hill, Roi Reichart, and Anna Korhonen. Simverb-3500: A large-scale evaluation set of verb similarity. In Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing, pages 2173–2182, Austin, Texas, November 2016. Association for Computational Linguistics.
- [212] Marjan Ghazvininejad, Xing Shi, Yejin Choi, and Kevin Knight. Generating topical poetry. In *Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing*, pages 1183–1191, Austin, Texas, November 2016. Association for Computational Linguistics.
- [213] Daniel Gildea and Daniel Jurafsky. Automatic labeling of semantic roles. Comput. Linguist., 28(3):245–288, September 2002.
- [214] Daniel Gildea and Giorgio Satta. Synchronous context-free grammars and optimal parsing strategies. *Computational Linguistics*, 2016.
- [215] Dan Gillick. Sentence boundary detection and the problem with the us. In Proceedings of Human Language Technologies: The 2009 Annual Conference of the North American Chapter of the Association for Computational Linguistics, Companion Volume: Short Papers, pages 241–244. Association for Computational Linguistics, 2009.
- [216] Dan Gillick, Cliff Brunk, Oriol Vinyals, and Amarnag Subramanya. Multilingual language processing from bytes. arXiv preprint arXiv:1512.00103, 2015.
- [217] Jesús Giménez and Lluis Marquez. Symtool: A general pos tagger generator based on support vector machines. In *In Proceedings of the 4th International Conference on Language Resources and Evaluation*. Citeseer, 2004.
- [218] Matthew L. Ginsberg. Dr.fill: Crosswords and an implemented solver for singly weighted csps. *CoRR*, abs/1401.4597, 2014.
- [219] Alessandra Giordani and Alessandro Moschitti. Translating questions to SQL queries with generative parsers discriminatively reranked. In *Proceedings of COLING 2012: Posters*, pages 401–410, Mumbai, India, December 2012. The COLING 2012 Organizing Committee.
- [220] Roxana Girju. The syntax and semantics of prepositions in the task of automatic interpretation of nominal phrases and compounds: A cross-linguistic study. *Computational Linguistics*, 35(2):185–228, 2009.
- [221] Dimitra Gkatzia, Oliver Lemon, and Verena Rieser. Natural language generation enhances human decision-making with uncertain information. 2016.
- [222] Yoav Goldberg and Joakim Nivre. A dynamic oracle for arc-eager dependency parsing. In *COLING*, pages 959–976, 2012.

- [223] Yoav Goldberg and Jon Orwant. A dataset of syntactic-ngrams over time from a very large corpus of english books. In Second Joint Conference on Lexical and Computational Semantics (* SEM), volume 1, pages 241–247, 2013.
- [224] Sharon Goldwater and Tom Griffiths. A fully bayesian approach to unsupervised part-of-speech tagging. In *Annual meeting-association for computational linguistics*, volume 45, page 744. Citeseer, 2007.
- [225] Wael H Gomaa and Aly A Fahmy. A survey of text similarity approaches. International Journal of Computer Applications, 68(13), 2013.
- [226] Joshua Goodman. A bit of progress in language modeling. CoRR, cs.CL/0108005, 2001.
- [227] Matthew R. Gormley, Mark Dredze, and Jason Eisner. Approximationaware dependency parsing by belief propagation. CoRR, abs/1508.02375, 2015.
- [228] Matthew R Gormley, Mark Dredze, and Jason Eisner. Approximation-aware dependency parsing by belief propagation. arXiv preprint arXiv:1508.02375, 2015.
- [229] Kartik Goyal, Sujay Kumar Jauhar, Huiying Li, Mrinmaya Sachan, Shashank Srivastava, and Eduard H Hovy. A structured distributional semantic model for event co-reference. In ACL (2), pages 467–473, 2013.
- [230] Derek Greene and James P. Cross. Unveiling the political agenda of the european parliament plenary: A topical analysis. CoRR, abs/1505.07302, 2015.
- [231] Caglar Gulcehre, Sungjin Ahn, Ramesh Nallapati, Bowen Zhou, and Yoshua Bengio. Pointing the unknown words. In *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 140–149, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [232] Jiang Guo, Wanxiang Che, David Yarowsky, Haifeng Wang, and Ting Liu. A distributed representation-based framework for cross-lingual transfer parsing. *Journal of Artificial Intelligence Research*, 55:995–1023, 2016.
- [233] Weiwei Guo and Mona Diab. Modeling sentences in the latent space. In Proceedings of the 50th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers), pages 864–872, Jeju Island, Korea, July 2012. Association for Computational Linguistics.
- [234] Parth Gupta, Kalika Bali, Rafael E Banchs, Monojit Choudhury, and Paolo Rosso. Query expansion for mixed-script information retrieval. In Proceedings of the 37th international ACM SIGIR conference on Research & development in information retrieval, pages 677–686. ACM, 2014.

- [235] Partha Gupta, Kalika Bali, Rafael E Banchs, Monojit Choudhury, and Paolo Rosso. Query expansion for multi-script information retrieval. In Proceedings of the 37th Annual ACM SIGIR Conference, SIGIR-2014, Gold Coast, Australia, June, pages 6–11, 2014.
- [236] Gholamreza Haffari, Ajay Nagesh, and Ganesh Ramakrishnan. Optimizing multivariate performance measures for learning relation extraction models. In *Proceedings of the 2015 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies*, pages 892–900, Denver, Colorado, May–June 2015. Association for Computational Linguistics.
- [237] Michael Hahn and Frank Keller. Modeling human reading with neural attention. In *Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing*, pages 85–95, Austin, Texas, November 2016. Association for Computational Linguistics.
- [238] David Leo Wright Hall, Greg Durrett, and Dan Klein. Less grammar, more features. In ACL (1), pages 228–237, 2014.
- [239] William L Hamilton, Kevin Clark, Jure Leskovec, and Dan Jurafsky. Inducing domain-specific sentiment lexicons from unlabeled corpora. arXiv preprint arXiv:1606.02820, 2016.
- [240] William L. Hamilton, Kevin Clark, Jure Leskovec, and Dan Jurafsky. Inducing domain-specific sentiment lexicons from unlabeled corpora. In *Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing*, pages 595–605, Austin, Texas, November 2016. Association for Computational Linguistics.
- [241] William L. Hamilton, Jure Leskovec, and Dan Jurafsky. Cultural shift or linguistic drift? comparing two computational measures of semantic change. In *Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing*, pages 2116–2121, Austin, Texas, November 2016. Association for Computational Linguistics.
- [242] William L Hamilton, Jure Leskovec, and Dan Jurafsky. Cultural shift or linguistic drift? comparing two computational measures of semantic change. arXiv preprint arXiv:1606.02821, 2016.
- [243] William L Hamilton, Jure Leskovec, and Dan Jurafsky. Diachronic word embeddings reveal statistical laws of semantic change. arXiv preprint arXiv:1605.09096, 2016.
- [244] Toke J. Hansen and Michael W. Mahoney. Semi-supervised eigenvectors for large-scale locally-biased learning. *Journal of Machine Learning Research*, 15:3691–3734, 2014.
- [245] Kaveh Hassani and Won-Sook Lee. Visualizing natural language descriptions: A survey. ACM Computing Surveys (CSUR), 49(1):17, 2016.

- [246] Hannah J Haynie and Claire Bowern. Phylogenetic approach to the evolution of color term systems. *Proceedings of the National Academy of Sciences*, 113(48):13666–13671, 2016.
- [247] He He, Jordan Boyd-Graber, and Hal Daumé III. Interpretese vs. translationese: The uniqueness of human strategies in simultaneous interpretation. In Proceedings of the 2016 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, pages 971–976, San Diego, California, June 2016. Association for Computational Linguistics.
- [248] He He, Jordan Boyd-Graber, and Hal Daume III. Interpretese vs. translationese: The uniqueness of human strategies in simultaneous interpretation. In North American Association for Computational Linguistics, 2016.
- [249] Luheng He, Mike Lewis, and Luke Zettlemoyer. Question-answer driven semantic role labeling: Using natural language to annotate natural language. In *Proceedings of the 2015 Conference on Empirical Methods in Natural Language Processing (EMNLP)*, pages 643–653, 2015.
- [250] Luheng He, Julian Michael, Mike Lewis, and Luke Zettlemoyer. Human-in-the-loop parsing. In *Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing*, pages 2337–2342, Austin, Texas, November 2016. Association for Computational Linguistics.
- [251] Luheng He, Julian Michael, Mike Lewis, and Luke Zettlemoyer. Human-in-the-loop parsing. *EMNLP*, 2016.
- [252] Marti A. Hearst. Automatic acquisition of hyponyms from large text corpora. In Proceedings of the 14th Conference on Computational Linguistics
 Volume 2, COLING '92, pages 539–545, Stroudsburg, PA, USA, 1992.
 Association for Computational Linguistics.
- [253] Michael Heilman and Kenji Sagae. Fast rhetorical structure theory discourse parsing. *CoRR*, abs/1505.02425, 2015.
- [254] James Henderson and Diana Popa. A vector space for distributional semantics for entailment. In Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers), pages 2052–2062, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [255] Karl Moritz Hermann and Phil Blunsom. The role of syntax in vector space models of compositional semantics. In ACL (1), pages 894–904. Citeseer, 2013.
- [256] Karl Moritz Hermann, Tomás Kociský, Edward Grefenstette, Lasse Espeholt, Will Kay, Mustafa Suleyman, and Phil Blunsom. Teaching machines to read and comprehend. CoRR, abs/1506.03340, 2015.

- [257] Damián G. Hernández, Damián H. Zanette, and Inés Samengo. Information-theoretical analysis of the statistical dependencies among three variables: Applications to written language. CoRR, abs/1508.03530, 2015.
- [258] Daniel Hewlett, Alexandre Lacoste, Llion Jones, Illia Polosukhin, Andrew Fandrianto, Jay Han, Matthew Kelcey, and David Berthelot. Wikireading: A novel large-scale language understanding task over wikipedia. arXiv preprint arXiv:1608.03542, 2016.
- [259] Daniel Hewlett, Alexandre Lacoste, Llion Jones, Illia Polosukhin, Andrew Fandrianto, Jay Han, Matthew Kelcey, and David Berthelot. Wikireading: A novel large-scale language understanding task over wikipedia. In Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers), pages 1535–1545, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [260] Felix Hill, Roi Reichart, and Anna Korhonen. Simlex-999: Evaluating semantic models with (genuine) similarity estimation. Computational Linquistics, 2016.
- [261] Julia Hirschberg and Christopher D Manning. Advances in natural language processing. *Science*, 349(6245):261–266, 2015.
- [262] Julia Hockenmaier and Mark Steedman. Ccgbank: a corpus of ccg derivations and dependency structures extracted from the penn treebank. *Computational Linguistics*, 33(3):355–396, 2007.
- [263] Raphael Hoffmann, Luke S. Zettlemoyer, and Daniel S. Weld. Extreme extraction: Only one hour per relation. *CoRR*, abs/1506.06418, 2015.
- [264] Alexander Hogenboom, Flavius Frasincar, Franciska de Jong, and Uzay Kaymak. Using rhetorical structure in sentiment analysis. Commun. ACM, 58(7):69-77, June 2015.
- [265] Paul Honeine. Analyzing sparse dictionaries for online learning with kernels. arXiv preprint arXiv:1409.6045, 2014.
- [266] Dirk Hovy and Shannon L Spruit. The social impact of natural language processing.
- [267] Dirk Hovy and Shannon L. Spruit. The social impact of natural language processing. In *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 2: Short Papers)*, pages 591–598, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [268] Wei-Ning Hsu, Yu Zhang, and James R. Glass. Recurrent neural network encoder with attention for community question answering. CoRR, abs/1603.07044, 2016.

- [269] Ruihong Huang, Ignacio Cases, Dan Jurafsky, Cleo Condoravdi, and Ellen Riloff. Distinguishing past, on-going, and future events: The eventstatus corpus. In *Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing*, pages 44–54, Austin, Texas, November 2016. Association for Computational Linguistics.
- [270] Ting-Hao (Kenneth) Huang, Francis Ferraro, Nasrin Mostafazadeh, Ishan Misra, Aishwarya Agrawal, Jacob Devlin, Ross Girshick, Xiaodong He, Pushmeet Kohli, Dhruv Batra, C. Lawrence Zitnick, Devi Parikh, Lucy Vanderwende, Michel Galley, and Margaret Mitchell. Visual storytelling. In Proceedings of the 2016 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, pages 1233–1239, San Diego, California, June 2016. Association for Computational Linguistics.
- [271] Matthew F Hurst and Kamal Nigam. Retrieving topical sentiments from online document collections. In *Electronic Imaging 2004*, pages 27–34. International Society for Optics and Photonics, 2003.
- [272] Muhammad Imran, Prasenjit Mitra, and Carlos Castillo. Twitter as a lifeline: Human-annotated twitter corpora for nlp of crisis-related messages. arXiv preprint arXiv:1605.05894, 2016.
- [273] Mohit Iyyer, Anupam Guha, Snigdha Chaturvedi, Jordan Boyd-Graber, and Hal Daumé III. Feuding families and former friends: Unsupervised learning for dynamic fictional relationships. In Proceedings of the 2016 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, pages 1534–1544, San Diego, California, June 2016. Association for Computational Linguistics.
- [274] Mohit Iyyer, Anupam Guha, Snigdha Chaturvedi, Jordan Boyd-Graber, and Hal Daumé III. Feuding families and former friends: Unsupervised learning for dynamic fictional relationships. In *Proceedings of NAACL-HLT*, pages 1534–1544, 2016.
- [275] Mohit Iyyer, Varun Manjunatha, Anupam Guha, Yogarshi Vyas, Jordan Boyd-Graber, Hal Daumé III, and Larry Davis. The amazing mysteries of the gutter: Drawing inferences between panels in comic book narratives. arXiv preprint arXiv:1611.05118, 2016.
- [276] Mohit Iyyer, Wen-tau Yih, and Ming-Wei Chang. Answering complicated question intents expressed in decomposed question sequences. arXiv preprint arXiv:1611.01242, 2016.
- [277] Rubén Izquierdo, Armando Suárez, and German Rigau. Word vs. class-based word sense disambiguation. *J. Artif. Intell. Res. (JAIR)*, 54:83–122, 2015.

- [278] Rubén Izquierdo Beviá, Armando Suárez Cueto, German Rigau Claramunt, et al. Word vs. class-based word sense disambiguation. 2015.
- [279] Max Jaderberg, Volodymyr Mnih, Wojciech Marian Czarnecki, Tom Schaul, Joel Z Leibo, David Silver, and Koray Kavukcuoglu. Reinforcement learning with unsupervised auxiliary tasks. arXiv preprint arXiv:1611.05397, 2016.
- [280] Kevin G Jamieson, Lalit Jain, Chris Fernandez, Nicholas J Glattard, and Rob Nowak. Next: A system for real-world development, evaluation, and application of active learning. In Advances in Neural Information Processing Systems, pages 2656–2664, 2015.
- [281] Sujay Kumar Jauhar, Peter Turney, and Eduard Hovy. Tables as semistructured knowledge for question answering. In *Proceedings of the 54th* Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers), pages 474–483, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [282] Sujay Kumar Jauhar, Peter Turney, and Eduard Hovy. Tabmcq: A dataset of general knowledge tables and multiple-choice questions. arXiv preprint arXiv:1602.03960, 2016.
- [283] Sujay Kumar Jauhar, Peter D. Turney, and Eduard H. Hovy. Tabmcq: A dataset of general knowledge tables and multiple-choice questions. CoRR, abs/1602.03960, 2016.
- [284] Yangfeng Ji, Trevor Cohn, Lingpeng Kong, Chris Dyer, and Jacob Eisenstein. Document context language models. *CoRR*, abs/1511.03962, 2015.
- [285] Yangfeng Ji and Jacob Eisenstein. Discriminative improvements to distributional sentence similarity. In *EMNLP*, pages 891–896, 2013.
- [286] Zhanglong Ji, Zachary C Lipton, and Charles Elkan. Differential privacy and machine learning: a survey and review. arXiv preprint arXiv:1412.7584, 2014.
- [287] Helen Jiang, Nikos Papasarantopoulos, and Shay B Cohen. Canonical correlation inference for mapping abstract scenes to text. arXiv preprint arXiv:1608.02784, 2016.
- [288] Lifeng Jin and William Schuler. A comparison of word similarity performance using explanatory and non-explanatory texts.
- [289] Richard Johansson and Luis Nieto Piña. Embedding a semantic network in a word space. In *Proceedings of the 2015 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies*, pages 1428–1433, Denver, Colorado, May–June 2015. Association for Computational Linguistics.

- [290] Mark Johnson. Why doesn't em find good hmm pos-taggers? In *EMNLP-CoNLL*, pages 296–305, 2007.
- [291] Aravind K Joshi and Yves Schabes. Tree-adjoining grammars. In *Hand-book of formal languages*, pages 69–123. Springer, 1997.
- [292] Shafiq Joty, Giuseppe Carenini, and Raymond T. Ng. Codra: A novel discriminative framework for rhetorical analysis. *Comput. Linguist.*, 41(3):385–435, September 2015.
- [293] Shafiq Joty, Giuseppe Carenini, and Raymond T Ng. Codra: A novel discriminative framework for rhetorical analysis. Computational Linguistics, 2015.
- [294] Rafal Jozefowicz, Oriol Vinyals, Mike Schuster, Noam Shazeer, and Yonghui Wu. Exploring the limits of language modeling. arXiv preprint arXiv:1602.02410, 2016.
- [295] Tomasz Jurczyk and Jinho D Choi. Multi-field structural decomposition for question answering. arXiv preprint arXiv:1604.00938, 2016.
- [296] Marcel Adam Just, Vladimir L Cherkassky, Sandesh Aryal, and Tom M Mitchell. A neurosemantic theory of concrete noun representation based on the underlying brain codes. *PloS one*, 5(1):e8622, 2010.
- [297] Hiroshi Kanayama and Tetsuya Nasukawa. Fully automatic lexicon expansion for domain-oriented sentiment analysis. In *Proceedings of the 2006 conference on empirical methods in natural language processing*, pages 355–363. Association for Computational Linguistics, 2006.
- [298] Anjuli Kannan, Karol Kurach, Sujith Ravi, Tobias Kaufmann, Andrew Tomkins, Balint Miklos, Greg Corrado, László Lukács, Marina Ganea, Peter Young, et al. Smart reply: Automated response suggestion for email. In Proceedings of the ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD), volume 36, pages 495–503, 2016.
- [299] Siavash Kazemian, Shunan Zhao, and Gerald Penn. Evaluating sentiment analysis in the context of securities trading. In *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 2094–2103, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [300] Michael Kearns, Aaron Roth, Zhiwei Steven Wu, and Grigory Yaroslavtsev. Private algorithms for the protected in social network search. *Proceedings of the National Academy of Sciences*, 113(4):913–918, 2016.
- [301] Greg A Keim, Noam M Shazeer, Michael L Littman, Sushant Agarwal, Catherine M Cheves, Joseph Fitzgerald, Jason Grosland, Fan Jiang, Shannon Pollard, and Karl Weinmeister. Proverb: The probabilistic cruciverbalist. New York Times (NYT), 792(10):70, 1999.

- [302] Daniel Khashabi, Tushar Khot, Ashish Sabharwal, Peter Clark, Oren Etzioni, and Dan Roth. Question answering via integer programming over semi-structured knowledge. arXiv preprint arXiv:1604.06076, 2016.
- [303] Mikhail Khodak, Nikunj Saunshi, and Kiran Vodrahalli. A large self-annotated corpus for sarcasm. arXiv preprint arXiv:1704.05579, 2017.
- [304] Tushar Khot, Niranjan Balasubramanian, Eric Gribkoff, Ashish Sabharwal, Peter Clark, and Oren Etzioni. Markov logic networks for natural language question answering. *CoRR*, abs/1507.03045, 2015.
- [305] Tushar Khot, Niranjan Balasubramanian, Eric Gribkoff, Ashish Sabharwal, Peter Clark, and Oren Etzioni. Markov logic networks for natural language question answering. arXiv preprint arXiv:1507.03045, 2015.
- [306] Soo-Min Kim and Eduard Hovy. Automatic detection of opinion bearing words and sentences. In Companion Volume to the Proceedings of the International Joint Conference on Natural Language Processing (IJCNLP), pages 61–66, 2005.
- [307] Sungho Kim, Youngjoong Ko, and Douglas W Oard. Combining lexical and statistical translation evidence for cross-language information retrieval. *Journal of the Association for Information Science and Technology*, 66(1):23–39, 2015.
- [308] Yea Seul Kim, Jessica Hullman, Matthew Burgess, and Eytan Adar. Simplescience: Lexical simplification of scientific terminology. In *Proceedings* of the 2016 Conference on Empirical Methods in Natural Language Processing, pages 1066–1071, Austin, Texas, November 2016. Association for Computational Linguistics.
- [309] Dan Klein and Christopher D. Manning. Accurate unlexicalized parsing. In Proceedings of the 41st Annual Meeting on Association for Computational Linguistics - Volume 1, ACL '03, pages 423–430, Stroudsburg, PA, USA, 2003. Association for Computational Linguistics.
- [310] Dan Klein and Christopher D Manning. Accurate unlexicalized parsing. In *Proceedings of the 41st Annual Meeting on Association for Computational Linguistics-Volume 1*, pages 423–430. Association for Computational Linguistics, 2003.
- [311] Dan Klein and Christopher D. Manning. Corpus-based induction of syntactic structure: Models of dependency and constituency. In *Proceedings* of the 42Nd Annual Meeting on Association for Computational Linguistics, ACL '04, Stroudsburg, PA, USA, 2004. Association for Computational Linguistics.
- [312] Dan Klein and Christopher D Manning. Corpus-based induction of syntactic structure: Models of dependency and constituency. In *Proceedings*

- of the 42nd Annual Meeting on Association for Computational Linguistics, page 478. Association for Computational Linguistics, 2004.
- [313] Jon Kleinberg, Jens Ludwig, Sendhil Mullainathan, Ziad Obermeyer, et al. Prediction policy problems. *American Economic Review*, 105(5):491–95, 2015.
- [314] Roman Klinger and Katrin Tomanek. Classical probabilistic models and conditional random fields. Citeseer, 2007.
- [315] Kevin Knight. A statistical machine translation tutorial workbook, 1999.
- [316] Kevin Knight. Bayesian inference with tears. Tutorial workbook, 2009.
- [317] Alistair Knott and Peter Vlugter. Syntactic disambiguation using presupposition resolution. In *Proceedings of the 4th Australasian Language* Technology Workshop (ALTW2003), 2003.
- [318] Philipp Koehn, Franz Josef Och, and Daniel Marcu. Statistical phrase-based translation. In *Proceedings of the 2003 Conference of the North American Chapter of the Association for Computational Linguistics on Human Language Technology-Volume 1*, pages 48–54. Association for Computational Linguistics, 2003.
- [319] Alexander Koller, Ralph Debusmann, Malte Gabsdil, and Kristina Striegnitz. Put my galakmid coin into the dispenser and kick it: Computational linguistics and theorem proving in a computer game. *Journal of Logic, Language and Information*, 13(2):187–206, 2004.
- [320] Ravi Kondadadi, Blake Howald, and Frank Schilder. A statistical nlg framework for aggregated planning and realization. In ACL (1), pages 1406–1415, 2013.
- [321] Ioannis Konstas and Mirella Lapata. A global model for concept-to-text generation. J. Artif. Intell. Res. (JAIR), 48:305–346, 2013.
- [322] Terry Koo, Xavier Carreras Pérez, and Michael Collins. Simple semisupervised dependency parsing. In 46th Annual Meeting of the Association for Computational Linguistics, pages 595–603, 2008.
- [323] Moshe Koppel, Jonathan Schler, and Shlomo Argamon. Computational methods in authorship attribution. *Journal of the American Society for information Science and Technology*, 60(1):9–26, 2009.
- [324] Lili Kotlerman, Ido Dagan, Maya Gorodetsky, and Ezra Daya. Sentence clustering via projection over term clusters. In Proceedings of the First Joint Conference on Lexical and Computational Semantics-Volume 1: Proceedings of the main conference and the shared task, and Volume 2: Proceedings of the Sixth International Workshop on Semantic Evaluation, pages 38–43. Association for Computational Linguistics, 2012.

- [325] Iuliia Kotseruba, Oscar J Avella Gonzalez, and John K Tsotsos. A review of 40 years of cognitive architecture research: Focus on perception, attention, learning and applications. arXiv preprint arXiv:1610.08602, 2016.
- [326] Niveda Krishnamoorthy, Girish Malkarnenkar, Raymond Mooney, Kate Saenko, and Sergio Guadarrama. Generating natural-language video descriptions using text-mined knowledge. NAACL HLT 2013, page 10, 2013.
- [327] Jayant Krishnamurthy and Tom M Mitchell. Joint syntactic and semantic parsing with combinatory categorial grammar. In ACL (1), pages 1188– 1198, 2014.
- [328] Germán Kruszewski and Marco Baroni. So similar and yet incompatible: Toward automated identification of semantically compatible words. In *Proceedings of NAACL*, pages 64–969, 2015.
- [329] Germán Kruszewski and Marco Baroni. So similar and yet incompatible: Toward the automated identification of semantically compatible words. In Proceedings of the 2015 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, pages 964–969, Denver, Colorado, May–June 2015. Association for Computational Linguistics.
- [330] Onur Küçüktunç, Erik Saule, Kamer Kaya, and Ümit V Çatalyürek. Diversifying citation recommendations. *ACM Transactions on Intelligent Systems and Technology (TIST)*, 5(4):55, 2015.
- [331] Marco Kuhlmann, Alexander Koller, and Giorgio Satta. Lexicalization and generative power in ccg. *Comput. Linguist.*, 41(2):215–247, June 2015.
- [332] Marco Kuhlmann, Alexander Koller, and Giorgio Satta. Lexicalization and generative power in ccg. *Computational Linguistics*, 2015.
- [333] Tobias Kuhn. A survey and classification of controlled natural languages. CoRR, abs/1507.01701, 2015.
- [334] Tobias Kuhn. The controlled natural language of randall munroe's thing explainer. arXiv preprint arXiv:1605.02457, 2016.
- [335] Vivek Kulkarni, Bryan Perozzi, and Steven Skiena. Freshman or fresher? quantifying the geographic variation of internet language. CoRR, abs/1510.06786, 2015.
- [336] Jonathan K. Kummerfeld, Taylor Berg-Kirkpatrick, and Dan Klein. An empirical analysis of optimization for max-margin nlp. In Proceedings of the 2015 Conference on Empirical Methods in Natural Language Processing, pages 273–279, Lisbon, Portugal, September 2015. Association for Computational Linguistics.

- [337] Jonathan K Kummerfeld, David Hall, James R Curran, and Dan Klein. Parser showdown at the wall street corral: An empirical investigation of error types in parser output. In Proceedings of the 2012 Joint Conference on Empirical Methods in Natural Language Processing and Computational Natural Language Learning, pages 1048–1059. Association for Computational Linguistics, 2012.
- [338] Sejeong Kwon, Meeyoung Cha, and Kyomin Jung. Rumor detection over varying time windows. *PLOS ONE*, 12(1):e0168344, 2017.
- [339] Shibamouli Lahiri. Squinky! A corpus of sentence-level formality, informativeness, and implicature. *CoRR*, abs/1506.02306, 2015.
- [340] Shalom Lappin and Herbert J. Leass. An algorithm for pronominal anaphora resolution. *Comput. Linguist.*, 20(4):535–561, December 1994.
- [341] Walter S. Lasecki, Luz Rello, and Jeffrey P. Bigham. Measuring text simplification with the crowd. In *Proceedings of the 12th Web for All Conference*, W4A '15, pages 4:1–4:9, New York, NY, USA, 2015. ACM.
- [342] Walter S. Lasecki, Rachel Wesley, Jeffrey Nichols, Anand Kulkarni, James F. Allen, and Jeffrey P. Bigham. Chorus: A crowd-powered conversational assistant. In *Proceedings of the 26th Annual ACM Symposium on User Interface Software and Technology*, UIST '13, pages 151–162, New York, NY, USA, 2013. ACM.
- [343] Walter S Lasecki, Rachel Wesley, Jeffrey Nichols, Anand Kulkarni, James F Allen, and Jeffrey P Bigham. Chorus: a crowd-powered conversational assistant. In *Proceedings of the 26th annual ACM symposium on User interface software and technology*, pages 151–162. ACM, 2013.
- [344] Angeliki Lazaridou, Georgiana Dinu, Adam Liska, and Marco Baroni. From visual attributes to adjectives through decompositional distributional semantics. arXiv preprint arXiv:1501.02714, 2015.
- [345] Angeliki Lazaridou, Marco Marelli, Roberto Zamparelli, and Marco Baroni. Compositional-ly derived representations of morphologically complex words in distributional semantics. In ACL (1), pages 1517–1526. Citeseer, 2013.
- [346] Angeliki Lazaridou, Nghia The Pham, and Marco Baroni. The red one!: On learning to refer to things based on their discriminative properties. arXiv preprint arXiv:1603.02618, 2016.
- [347] Lillian Lee. Fast context-free grammar parsing requires fast boolean matrix multiplication. *Journal of the ACM (JACM)*, 49(1):1–15, 2002.
- [348] Moontae Lee, Xiaodong He, Wen-tau Yih, Jianfeng Gao, Li Deng, and Paul Smolensky. Reasoning in vector space: An exploratory study of question answering. arXiv preprint arXiv:1511.06426, 2015.

- [349] Joël Legrand and Ronan Collobert. Joint rnn-based greedy parsing and word composition. arXiv preprint arXiv:1412.7028, 2014.
- [350] Tao Lei, Hrishikesh Joshi, Regina Barzilay, Tommi Jaakkola, Kateryna Tymoshenko, Alessandro Moschitti, and Lluís Màrquez. Semi-supervised question retrieval with gated convolutions. In *Proceedings of the 2016 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies*, pages 1279–1289, San Diego, California, June 2016. Association for Computational Linguistics.
- [351] Omer Levy and Ido Dagan. Annotating relation inference in context via question answering. In *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 2: Short Papers)*, pages 249–255, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [352] Omer Levy, Steffen Remus, Chris Biemann, and Ido Dagan. Do supervised distributional methods really learn lexical inference relations? In Proceedings of the 2015 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, pages 970–976, Denver, Colorado, May–June 2015. Association for Computational Linguistics.
- [353] Mike Lewis and Mark Steedman. Combining distributional and logical semantics. *Transactions of the Association for Computational Linguistics*, 1:179–192, 2013.
- [354] Fei Li and HV Jagadish. Constructing an interactive natural language interface for relational databases. *Proceedings of the VLDB Endowment*, 8(1):73–84, 2014.
- [355] Jiwei Li, Xinlei Chen, Eduard H. Hovy, and Dan Jurafsky. Visualizing and understanding neural models in NLP. CoRR, abs/1506.01066, 2015.
- [356] Jiwei Li, Michel Galley, Chris Brockett, Georgios Spithourakis, Jianfeng Gao, and Bill Dolan. A persona-based neural conversation model. In *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 994–1003, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [357] Jiwei Li and Eduard Hovy. Reflections on sentiment/opinion analysis. arXiv preprint arXiv:1507.01636, 2015.
- [358] Jiwei Li and Eduard H. Hovy. The NLP engine: A universal turing machine for NLP. *CoRR*, abs/1503.00168, 2015.
- [359] Jiwei Li and Eduard H. Hovy. Reflections on sentiment/opinion analysis. CoRR, abs/1507.01636, 2015.

- [360] Linlin Li, Ivan Titov, and Caroline Sporleder. Improved estimation of entropy for evaluation of word sense induction. *Computational Linguistics*, 40(3):671–685, 2014.
- [361] Percy Liang. Learning executable semantic parsers for natural language understanding. arXiv preprint arXiv:1603.06677, 2016.
- [362] Percy Liang, Michael I Jordan, and Dan Klein. Learning dependency-based compositional semantics. In *Proceedings of the 49th Annual Meeting of the Association for Computational Linguistics: Human Language Technologies-Volume 1*, pages 590–599. Association for Computational Linguistics, 2011.
- [363] Percy Liang, Michael I Jordan, and Dan Klein. Learning dependency-based compositional semantics. Computational Linguistics, 39(2):389–446, 2013.
- [364] Percy Liang and Christopher Potts. Bringing machine learning and compositional semantics together. Annu. Rev. Linguist., 1(1):355–376, 2015.
- [365] Percy Liang, Ben Taskar, and Dan Klein. Alignment by agreement. In Proceedings of the main conference on Human Language Technology Conference of the North American Chapter of the Association of Computational Linguistics, pages 104–111. Association for Computational Linguistics, 2006.
- [366] Dahua Lin, Chen Kong, Sanja Fidler, and Raquel Urtasun. Generating multi-sentence lingual descriptions of indoor scenes. *CoRR*, abs/1503.00064, 2015.
- [367] Xiao Ling, Sameer Singh, and Daniel S Weld. Design challenges for entity linking. Transactions of the Association for Computational Linguistics, 3:315–328, 2015.
- [368] Michael L. Littman, Greg A. Keim, and Noam Shazeer. A probabilistic approach to solving crossword puzzles. *Artificial Intelligence*, 134(12):23 55, 2002.
- [369] Michael L Littman, Greg A Keim, and Noam Shazeer. A probabilistic approach to solving crossword puzzles. *Artificial Intelligence*, 134(1):23–55, 2002.
- [370] Reginald Long, Panupong Pasupat, and Percy Liang. Simpler context-dependent logical forms via model projections. arXiv preprint arXiv:1606.05378, 2016.
- [371] Babak Loni. A survey of state-of-the-art methods on question classification. 2011.

- [372] Amnon Lotan, Asher Stern, and Ido Dagan. Truthteller: Annotating predicate truth. In *HLT-NAACL*, pages 752–757, 2013.
- [373] Ryan Lowe, Nissan Pow, Iulian Serban, and Joelle Pineau. The ubuntu dialogue corpus: A large dataset for research in unstructured multi-turn dialogue systems. arXiv preprint arXiv:1506.08909, 2015.
- [374] Michal Lukasik, Trevor Cohn, and Kalina Bontcheva. Estimating collective judgement of rumours in social media. *CoRR*, abs/1506.00468, 2015.
- [375] Aman Madaan, Ashish Mittal, Ganesh Ramakrishnan, and Sunita Sarawagi. Numerical relation extraction with minimal supervision. 2016.
- [376] Junhua Mao, Jonathan Huang, Alexander Toshev, Oana Camburu, Alan L. Yuille, and Kevin Murphy. Generation and comprehension of unambiguous object descriptions. CoRR, abs/1511.02283, 2015.
- [377] Adam Marcus, Eugene Wu, David Karger, Samuel Madden, and Robert Miller. Human-powered sorts and joins. *Proc. VLDB Endow.*, 5(1):13–24, September 2011.
- [378] Marco Marelli and Marco Baroni. Affixation in semantic space: Modeling morpheme meanings with compositional distributional semantics. *Psychological review*, 122(3):485, 2015.
- [379] Marco Marelli, Georgiana Dinu, Roberto Zamparelli, and Marco Baroni. Picking buttercups and eating butter cups: Spelling alternations, semantic relatedness, and their consequences for compound processing. *Applied Psycholinguistics*, 36(06):1421–1439, 2015.
- [380] Zita Marinho, André F. T. Martins, Shay B. Cohen, and Noah A. Smith. Semi-supervised learning of sequence models with method of moments. In *Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing*, pages 287–296, Austin, Texas, November 2016. Association for Computational Linguistics.
- [381] Kenneth Marino, Ruslan Salakhutdinov, and Abhinav Gupta. The more you know: Using knowledge graphs for image classification. arXiv preprint arXiv:1612.04844, 2016.
- [382] Sebastian Martschat and Michael Strube. Latent structures for coreference resolution. *Transactions of the Association for Computational Linguistics*, 3:405–418, 2015.
- [383] Sebastian Martschat and Michael Strube. Latent structures for coreference resolution. *Transactions of the Association for Computational Linguistics*, 3:405–418, 2015.
- [384] Philip Massey, Patrick Xia, David Bamman, and Noah A Smith. Annotating character relationships in literary texts. arXiv preprint arXiv:1512.00728, 2015.

- [385] Shotaro Matsumoto, Hiroya Takamura, and Manabu Okumura. Sentiment classification using word sub-sequences and dependency sub-trees. In Pacific-Asia Conference on Knowledge Discovery and Data Mining, pages 301–311. Springer, 2005.
- [386] Austin Matthews, Eva Schlinger, Alon Lavie, and Chris Dyer. Synthesizing compound words for machine translation. In *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 1085–1094, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [387] Andrew McCallum. Efficiently inducing features of conditional random fields. In *Proceedings of the Nineteenth conference on Uncertainty in Artificial Intelligence*, pages 403–410. Morgan Kaufmann Publishers Inc., 2002.
- [388] Diana McCarthy, Marianna Apidianaki, and Katrin Erk. Word sense clustering and clusterability. *Computational Linguistics*, 2016.
- [389] Ryan McDonald, Fernando Pereira, Kiril Ribarov, and Jan Hajič. Non-projective dependency parsing using spanning tree algorithms. In Proceedings of the Conference on Human Language Technology and Empirical Methods in Natural Language Processing, HLT '05, pages 523-530, Stroudsburg, PA, USA, 2005. Association for Computational Linguistics.
- [390] Hongyuan Mei, Mohit Bansal, and Matthew R. Walter. What to talk about and how? selective generation using lstms with coarse-to-fine alignment. In Proceedings of the 2016 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, pages 720–730, San Diego, California, June 2016. Association for Computational Linguistics.
- [391] Bernard Merialdo. Tagging english text with a probabilistic model. Computational linguistics, 20(2):155–171, 1994.
- [392] Grégoire Mesnil, Tomas Mikolov, Marc'Aurelio Ranzato, and Yoshua Bengio. Ensemble of generative and discriminative techniques for sentiment analysis of movie reviews. arXiv preprint arXiv:1412.5335, 2014.
- [393] Donald Metzler, Susan Dumais, and Christopher Meek. Similarity measures for short segments of text. Springer, 2007.
- [394] Rada Mihalcea. Making computers laugh: Investigations in automatic humor recognition. In In Proc. of the Joint Conference on Human Language Technology / Empirical Methods in Natural Language Processing (HLT/EMNLP), 2005.
- [395] Rada Mihalcea, Courtney Corley, and Carlo Strapparava. Corpus-based and knowledge-based measures of text semantic similarity. In AAAI, volume 6, pages 775–780, 2006.

- [396] Tomas Mikolov, Armand Joulin, and Marco Baroni. A roadmap towards machine intelligence. *CoRR*, abs/1511.08130, 2015.
- [397] Tomas Mikolov, Quoc V Le, and Ilya Sutskever. Exploiting similarities among languages for machine translation. arXiv preprint arXiv:1309.4168, 2013.
- [398] Tristan Miller and Iryna Gurevych. Automatic disambiguation of english puns.
- [399] Tristan Miller and Iryna Gurevych. Automatic disambiguation of english puns. In *ACL* (1), pages 719–729, 2015.
- [400] Jeff Mitchell and Mirella Lapata. Vector-based models of semantic composition. In *ACL*, pages 236–244, 2008.
- [401] Takashi Miyazaki and Nobuyuki Shimizu. Cross-lingual image caption generation. In *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 1780–1790, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [402] Saif M Mohammad, Bonnie J Dorr, Graeme Hirst, and Peter D Turney. Computing lexical contrast. Computational Linguistics, 39(3):555–590, 2013.
- [403] Mehryar Mohri. Finite-state transducers in language and speech processing. *Computational linguistics*, 23(2):269–311, 1997.
- [404] Nasrin Mostafazadeh, Nathanael Chambers, Xiaodong He, Devi Parikh, Dhruv Batra, Lucy Vanderwende, Pushmeet Kohli, and James Allen. A corpus and cloze evaluation for deeper understanding of commonsense stories. In Proceedings of the 2016 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, pages 839–849, San Diego, California, June 2016. Association for Computational Linguistics.
- [405] Nasrin Mostafazadeh, Ishan Misra, Jacob Devlin, Margaret Mitchell, Xiaodong He, and Lucy Vanderwende. Generating natural questions about an image. arXiv preprint arXiv:1603.06059, 2016.
- [406] Nasrin Mostafazadeh, Ishan Misra, Jacob Devlin, Margaret Mitchell, Xiaodong He, and Lucy Vanderwende. Generating natural questions about an image. In *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 1802–1813, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [407] Lili Mou, Rui Yan, Ge Li, Lu Zhang, and Zhi Jin. Backbone language modeling for constrained natural language generation. arXiv preprint arXiv:1512.06612, 2015.

- [408] Nikola Mrkšić, Diarmuid Ó Séaghdha, Blaise Thomson, Milica Gašić, Lina M. Rojas-Barahona, Pei-Hao Su, David Vandyke, Tsung-Hsien Wen, and Steve Young. Counter-fitting word vectors to linguistic constraints. In Proceedings of the 2016 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, pages 142–148, San Diego, California, June 2016. Association for Computational Linguistics.
- [409] Andreas C. Müller and Sven Behnke. pystruct learning structured prediction in python. Journal of Machine Learning Research, 15:2055–2060, 2014.
- [410] Prakash M Nadkarni, Lucila Ohno-Machado, and Wendy W Chapman. Natural language processing: an introduction. *Journal of the American Medical Informatics Association*, 18(5):544–551, 2011.
- [411] Ndapandula Nakashole and Tom M Mitchell. A knowledge-intensive model for prepositional phrase attachment. In *Proceedings of the 53rd Annual Meeting of the Association for Computational Linguistics*, (ACL), pages 365–375, 2015.
- [412] Karthik Narasimhan, Tejas Kulkarni, and Regina Barzilay. Language understanding for text-based games using deep reinforcement learning. *CoRR*, abs/1506.08941, 2015.
- [413] Shashi Narayan and Shay B Cohen. Optimizing spectral learning for parsing. arXiv preprint arXiv:1606.02342, 2016.
- [414] Tetsuya Nasukawa and Jeonghee Yi. Sentiment analysis: Capturing favorability using natural language processing. In *Proceedings of the 2nd international conference on Knowledge capture*, pages 70–77. ACM, 2003.
- [415] Arvind Neelakantan and Ming-Wei Chang. Inferring missing entity type instances for knowledge base completion: New dataset and methods. CoRR, abs/1504.06658, 2015.
- [416] Arvind Neelakantan and Michael Collins. Learning dictionaries for named entity recognition using minimal supervision. *CoRR*, abs/1504.06650, 2015.
- [417] Arvind Neelakantan, Benjamin Roth, and Andrew McCallum. Compositional vector space models for knowledge base completion. *CoRR*, abs/1504.06662, 2015.
- [418] Graham Neubig and Taro Watanabe. Optimization for statistical machine translation: A survey. *Computational Linguistics*, 2016.
- [419] Jun-Ping Ng and Min-Yen Kan. QANUS: an open-source question-answering platform. *CoRR*, abs/1501.00311, 2015.

- [420] Dong Nguyen, A. Seza Dogruöz, Carolyn Penstein Rosé, and Franciska de Jong. Computational sociolinguistics: A survey. CoRR, abs/1508.07544, 2015.
- [421] Vlad Niculae and Cristian Danescu-Niculescu-Mizil. Conversational markers of constructive discussions. In *Proceedings of the 2016 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies*, pages 568–578, San Diego, California, June 2016. Association for Computational Linguistics.
- [422] Vlad Niculae and Cristian Danescu-Niculescu-Mizil. Conversational markers of constructive discussions. arXiv preprint arXiv:1604.07407, 2016.
- [423] Vlad Niculae, Srijan Kumar, Jordan Boyd-Graber, and Cristian Danescu-Niculescu-Mizil. Linguistic harbingers of betrayal: A case study on an online strategy game. arXiv preprint arXiv:1506.04744, 2015.
- [424] Peter Nilsson and Pierre Nugues. Automatic discovery of feature sets for dependency parsing. In *Proceedings of the 23rd International Conference on Computational Linguistics*, pages 824–832. Association for Computational Linguistics, 2010.
- [425] Madhav Nimishakavi, Uday Singh Saini, and Partha Talukdar. Relation schema induction using tensor factorization with side information. arXiv preprint arXiv:1605.04227, 2016.
- [426] Joakim Nivre. Incrementality in deterministic dependency parsing. In *Proceedings of the Workshop on Incremental Parsing: Bringing Engineering and Cognition Together*, pages 50–57. Association for Computational Linguistics, 2004.
- [427] Joakim Nivre. Algorithms for deterministic incremental dependency parsing. *Computational Linguistics*, 34(4):513–553, 2008.
- [428] Joakim Nivre and Ryan T McDonald. Integrating graph-based and transition-based dependency parsers. In *ACL*, pages 950–958, 2008.
- [429] Joakim Nivre and Mario Scholz. Deterministic dependency parsing of english text. In Proceedings of the 20th International Conference on Computational Linguistics, COLING '04, Stroudsburg, PA, USA, 2004. Association for Computational Linguistics.
- [430] Joakim Nivre and Mario Scholz. Deterministic dependency parsing of english text. In *Proceedings of the 20th international conference on Computational Linguistics*, page 64. Association for Computational Linguistics, 2004.
- [431] Clayton Norris. Petrarch 2: Petrarcher. arXiv preprint arXiv:1602.07236, 2016.

- [432] Filipe Nunes Ribeiro, Matheus Araújo, Pollyanna Gonçalves, Fabrício Benevenuto, and Marcos André Gonçalves. A benchmark comparison of state-of-the-practice sentiment analysis methods. arXiv preprint arXiv:1512.01818, 2015.
- [433] Franz Josef Och, Daniel Gildea, Sanjeev Khudanpur, Anoop Sarkar, Kenji Yamada, Alexander M Fraser, Shankar Kumar, Libin Shen, David Smith, Katherine Eng, et al. A smorgasbord of features for statistical machine translation. In *HLT-NAACL*, pages 161–168, 2004.
- [434] Franz Josef Och and Hermann Ney. A systematic comparison of various statistical alignment models. *Computational linguistics*, 29(1):19–51, 2003.
- [435] Franz Josef Och and Hermann Ney. The alignment template approach to statistical machine translation. *Comput. Linguist.*, 30(4):417–449, December 2004.
- [436] Takeshi Onishi, Hai Wang, Mohit Bansal, Kevin Gimpel, and David McAllester. Who did what: A large-scale person-centered cloze dataset. arXiv preprint arXiv:1608.05457, 2016.
- [437] Takeshi Onishi, Hai Wang, Mohit Bansal, Kevin Gimpel, and David McAllester. Who did what: A large-scale person-centered cloze dataset. In Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing, pages 2230–2235, Austin, Texas, November 2016. Association for Computational Linguistics.
- [438] Lilja Øvrelid and Joakim Nivre. When word order and part-of-speech tags are not enough—swedish dependency parsing with rich linguistic features. In *Proceedings of the International Conference on Recent Advances in Natural Language Processing (RANLP)*, pages 447–451, 2007.
- [439] Makbule Gulcin Ozsoy. From word embeddings to item recommendation. arXiv preprint arXiv:1601.01356, 2016.
- [440] Deepak P. Mixkmeans: Clustering question-answer archives. In Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing, pages 1576–1585, Austin, Texas, November 2016. Association for Computational Linguistics.
- [441] Maike Paetzel, Ramesh Manuvinakurike, and David DeVault. so, which one is it? the effect of alternative incremental architectures in a high-performance game-playing agent. In 16th Annual Meeting of the Special Interest Group on Discourse and Dialogue, page 77, 2015.
- [442] Bo Pang, Lillian Lee, and Shivakumar Vaithyanathan. Thumbs up?: sentiment classification using machine learning techniques. In *Proceedings of the ACL-02 conference on Empirical methods in natural language*

- processing-Volume 10, pages 79–86. Association for Computational Linguistics, 2002.
- [443] Liang Pang, Yanyan Lan, Jiafeng Guo, Jun Xu, Shengxian Wan, and Xueqi Cheng. Text matching as image recognition. *CoRR*, abs/1602.06359, 2016.
- [444] Patrick Pantel and Dekang Lin. Discovering word senses from text. In Proceedings of the Eighth ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, KDD '02, pages 613–619, New York, NY, USA, 2002. ACM.
- [445] Patrick Pantel and Dekang Lin. Discovering word senses from text. In Proceedings of the eighth ACM SIGKDD international conference on Knowledge discovery and data mining, pages 613–619. ACM, 2002.
- [446] Denis Paperno and Marco Baroni. When the whole is less than the sum of its parts: How composition affects pmi values in distributional semantic vectors. Computational Linguistics, 2016.
- [447] Denis Paperno, Germán Kruszewski, Angeliki Lazaridou, Ngoc Quan Pham, Raffaella Bernardi, Sandro Pezzelle, Marco Baroni, Gemma Boleda, and Raquel Fernandez. The lambada dataset: Word prediction requiring a broad discourse context. In *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 1525–1534, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [448] Hristo S. Paskov, John C. Mitchell, and Trevor J. Hastie. Data representation and compression using linear-programming approximations. CoRR, abs/1511.06606, 2015.
- [449] Panupong Pasupat and Percy Liang. Inferring logical forms from denotations. arXiv preprint arXiv:1606.06900, 2016.
- [450] Panupong Pasupat and Percy Liang. Inferring logical forms from denotations. In Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers), pages 23–32, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [451] Adam Pauls, Dan Klein, David Chiang, and Kevin Knight. Unsupervised syntactic alignment with inversion transduction grammars. In *Human Language Technologies: The 2010 Annual Conference of the North American Chapter of the Association for Computational Linguistics*, HLT '10, pages 118–126, Stroudsburg, PA, USA, 2010. Association for Computational Linguistics.
- [452] Umashanthi Pavalanathan and Jacob Eisenstein. Confounds and consequences in geotagged twitter data. In *Proceedings of the 2015 Conference*

- on Empirical Methods in Natural Language Processing, pages 2138–2148, Lisbon, Portugal, September 2015. Association for Computational Linguistics.
- [453] Ellie Pavlick, Johan Bos, Malvina Nissim, Charley Beller, Benjamin Van Durme, and Chris Callison-Burch. Adding semantics to data-driven paraphrasing. In *Proceedings of the 53rd Annual Meeting of the Association for Computational Linguistics*, ACL, pages 1512–1522, 2015.
- [454] Ellie Pavlick and Chris Callison-Burch. Most "babies" are "little" and most "problems" are "huge": Compositional entailment in adjective-nouns. In *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 2164–2173, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [455] Ellie Pavlick, Pushpendre Rastogi, Juri Ganitkevitch, Benjamin Van Durme, and Chris Callison-Burch. Ppdb 2.0: Better paraphrase ranking, fine-grained entailment relations, word embeddings, and style classification. In Proceedings of the 53rd Annual Meeting of the Association for Computational Linguistics and the 7th International Joint Conference on Natural Language Processing (Volume 2: Short Papers), pages 425–430, Beijing, China, July 2015. Association for Computational Linguistics.
- [456] Ellie Pavlick and Joel Tetreault. An empirical analysis of formality in online communication. *Transactions of the Association for Computational Linguistics*, 4:61–74, 2016.
- [457] Slav Petrov, Leon Barrett, and Dan Klein. Non-local modeling with a mixture of pcfgs. In *Proceedings of the Tenth Conference on Computational Natural Language Learning*, pages 14–20. Association for Computational Linguistics, 2006.
- [458] Slav Petrov, Leon Barrett, Romain Thibaux, and Dan Klein. Learning accurate, compact, and interpretable tree annotation. In *Proceedings of the 21st International Conference on Computational Linguistics and the 44th annual meeting of the Association for Computational Linguistics*, pages 433–440. Association for Computational Linguistics, 2006.
- [459] Slav Petrov and Dan Klein. Improved inference for unlexicalized parsing. In *HLT-NAACL*, volume 7, pages 404–411, 2007.
- [460] Mohammad Taher Pilehvar, David Jurgens, and Roberto Navigli. Align, disambiguate and walk: A unified approach for measuring semantic similarity. In Proceedings of the 51st Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers), pages 1341–1351, Sofia, Bulgaria, August 2013. Association for Computational Linguistics.

- [461] Mohammad Taher Pilehvar, David Jurgens, and Roberto Navigli. Align, disambiguate and walk: A unified approach for measuring semantic similarity. In *ACL* (1), pages 1341–1351, 2013.
- [462] Mohammad Taher Pilehvar and Roberto Navigli. A large-scale pseudoword-based evaluation framework for state-of-the-art word sense disambiguation. *Computational Linguistics*, 2014.
- [463] Yuval Pinter, Roi Reichart, and Idan Szpektor. The yahoo query treebank, v. 1.0. arXiv preprint arXiv:1605.02945, 2016.
- [464] Hoifung Poon and Pedro Domingos. Unsupervised semantic parsing. In Proceedings of the 2009 Conference on Empirical Methods in Natural Language Processing: Volume 1 Volume 1, EMNLP '09, pages 1–10, Stroudsburg, PA, USA, 2009. Association for Computational Linguistics.
- [465] Ana-Maria Popescu and Orena Etzioni. Extracting product features and opinions from reviews. In *Natural language processing and text mining*, pages 9–28. Springer, 2007.
- [466] Alexander Port, Iulia Gheorghita, Daniel Guth, John M. Clark, Crystal Liang, Shival Dasu, and Matilde Marcolli. Persistent topology of syntax. CoRR, abs/1507.05134, 2015.
- [467] Nima Pourdamghani, Yang Gao, Ulf Hermjakob, and Kevin Knight. Aligning english strings with abstract meaning representation graphs. In *Proceedings of the 2014 Conference on Empirical Methods in Natural Language Processing (EMNLP)*, pages 425–429, Doha, Qatar, October 2014. Association for Computational Linguistics.
- [468] David M. W. Powers. What the f-measure doesn't measure: Features, flaws, fallacies and fixes. CoRR, abs/1503.06410, 2015.
- [469] Vinodkumar Prabhakaran, Ashima Arora, and Owen Rambow. Staying on topic: An indicator of power in political debates. In *EMNLP*, pages 1481–1486, 2014.
- [470] Sandra D Prado, Silvio R Dahmen, Ana LC Bazzan, Padraig Mac Carron, and Ralph Kenna. Temporal network analysis of literary texts. arXiv preprint arXiv:1602.07275, 2016.
- [471] Rashmi Prasad, Bonnie Webber, and Aravind Joshi. Reflections on the penn discourse treebank, comparable corpora, and complementary annotation. *Computational Linguistics*, 2014.
- [472] Michael Pust, Ulf Hermjakob, Kevin Knight, Daniel Marcu, and Jonathan May. Parsing english into abstract meaning representation using syntax-based machine translation. *Training*, 10:218–021, 2015.

- [473] Michael Pust, Ulf Hermjakob, Kevin Knight, Daniel Marcu, and Jonathan May. Using syntax-based machine translation to parse english into abstract meaning representation. *CoRR*, abs/1504.06665, 2015.
- [474] Qiang Qiu and Guillermo Sapiro. Learning transformations for clustering and classification. *Journal of Machine Learning Research*, 16:187–225, 2015.
- [475] Lizhen Qu, Gabriela Ferraro, Liyuan Zhou, Weiwei Hou, Nathan Schneider, and Timothy Baldwin. Big data small data, in domain out-of domain, known word unknown word: The impact of word representation on sequence labelling tasks. *CoRR*, abs/1504.05319, 2015.
- [476] Ariadna Quattoni, Arnau Ramisa, Pranava Swaroop Madhyastha, Edgar Simo-Serra, and Francesc Moreno-Noguer. Structured prediction with output embeddings for semantic image annotation. In Proceedings of the 2016 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, pages 552–557, San Diego, California, June 2016. Association for Computational Linguistics.
- [477] Ella Rabinovich, Shuly Wintner, and Ofek Luis Lewinsohn. The haifa corpus of translationese. *CoRR*, abs/1509.03611, 2015.
- [478] Karthik Raghunathan, Heeyoung Lee, Sudarshan Rangarajan, Nathanael Chambers, Mihai Surdeanu, Dan Jurafsky, and Christopher Manning. A multi-pass sieve for coreference resolution. In *Proceedings of the 2010 Conference on Empirical Methods in Natural Language Processing*, pages 492–501. Association for Computational Linguistics, 2010.
- [479] Stefania Raimondo and Frank Rudzicz. Sex, drugs, and violence. *CoRR*, abs/1608.03448, 2016.
- [480] Pranav Rajpurkar, Jian Zhang, Konstantin Lopyrev, and Percy Liang. Squad: 100, 000+ questions for machine comprehension of text. *CoRR*, abs/1606.05250, 2016.
- [481] Pranav Rajpurkar, Jian Zhang, Konstantin Lopyrev, and Percy Liang. Squad: 100,000+ questions for machine comprehension of text. In *Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing*, pages 2383–2392, Austin, Texas, November 2016. Association for Computational Linguistics.
- [482] Pranav Rajpurkar, Jian Zhang, Konstantin Lopyrev, and Percy Liang. Squad: 100,000+ questions for machine comprehension of text. arXiv preprint arXiv:1606.05250, 2016.
- [483] Carlos Ramisch, Silvio Cordeiro, Leonardo Zilio, Marco Idiart, and Aline Villavicencio. How naked is the naked truth? a multilingual lexicon

- of nominal compound compositionality. In *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 2: Short Papers)*, pages 156–161, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [484] Rajesh Ranganath and David Blei. Correlated random measures. arXiv preprint arXiv:1507.00720, 2015.
- [485] Sudha Rao, Yogarshi Vyas, Hal Daumé III, and Philip Resnik. Parser for abstract meaning representation using learning to search. CoRR, abs/1510.07586, 2015.
- [486] Hannah Rashkin, Sameer Singh, and Yejin Choi. Connotation frames: Typed relations of implied sentiment in predicate-argument structure. CoRR, abs/1506.02739, 2015.
- [487] Mohammad Sadegh Rasooli and Joel R. Tetreault. Yara parser: A fast and accurate dependency parser. *CoRR*, abs/1503.06733, 2015.
- [488] Adwait Ratnaparkhi et al. A maximum entropy model for part-of-speech tagging. In *Proceedings of the conference on empirical methods in natural language processing*, volume 1, pages 133–142. Philadelphia, USA, 1996.
- [489] Marta Recasens, Cristian Danescu-Niculescu-Mizil, and Dan Jurafsky. Linguistic models for analyzing and detecting biased language. In *ACL* (1), pages 1650–1659, 2013.
- [490] Marta Recasens, Marie-Catherine de Marneffe, and Christopher Potts. The life and death of discourse entities: Identifying singleton mentions. In *HLT-NAACL*, pages 627–633, 2013.
- [491] Siva Reddy, Mirella Lapata, and Mark Steedman. Large-scale semantic parsing without question-answer pairs. *Transactions of the Association for Computational Linguistics*, 2:377–392, 2014.
- [492] Siva Reddy, Oscar Täckström, Michael Collins, Tom Kwiatkowski, Dipanjan Das, Mark Steedman, and Mirella Lapata. Transforming dependency structures to logical forms for semantic parsing. Transactions of the Association for Computational Linguistics, 4:127–140, 2016.
- [493] Radim Řehuřek. Scalability of Semantic Analysis in Natural Language Processing. PhD thesis, Masaryk University, 2011.
- [494] Nils Reimers, Nazanin Dehghani, and Iryna Gurevych. Temporal anchoring of events for the timebank corpus. In *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 2195–2204, Berlin, Germany, August 2016. Association for Computational Linguistics.

- [495] Adithya Renduchintala, Rebecca Knowles, Philipp Koehn, and Jason Eisner. User modeling in language learning with macaronic texts. In Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers), pages 1859–1869, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [496] Kyle D Richardson and Jonas Kuhn. Learning to make inferences in a semantic parsing task. *Transactions of the Association for Computational Linguistics*, 4:155–168, 2016.
- [497] Matthew Richardson, Christopher JC Burges, and Erin Renshaw. Mctest: A challenge dataset for the open-domain machine comprehension of text. In *EMNLP*, volume 3, page 4, 2013.
- [498] Konrad Rieck and Christian Wressnegger. Harry: a tool for measuring string similarity. *Journal of Machine Learning Research*, 17(9):1–5, 2016.
- [499] Sebastian Riedel, Limin Yao, Andrew McCallum, and Benjamin M Marlin. Relation extraction with matrix factorization and universal schemas. 2013.
- [500] Verena Rieser and Oliver Lemon. Natural language generation as planning under uncertainty using reinforcement learning. arXiv preprint arXiv:1606.04686, 2016.
- [501] Ellen Riloff and Janyce Wiebe. Learning extraction patterns for subjective expressions. In *Proceedings of the 2003 conference on Empirical methods in natural language processing*, pages 105–112. Association for Computational Linguistics, 2003.
- [502] Elena Rishes, Stephanie M Lukin, David K Elson, and Marilyn A Walker. Generating different story tellings from semantic representations of narrative. In *International Conference on Interactive Digital Storytelling*, pages 192–204. Springer, 2013.
- [503] Alan Ritter, Sam Clark, Oren Etzioni, et al. Named entity recognition in tweets: an experimental study. In *Proceedings of the Conference on Empirical Methods in Natural Language Processing*, pages 1524–1534. Association for Computational Linguistics, 2011.
- [504] Alan Ritter, Mausam, Oren Etzioni, and Sam Clark. Open domain event extraction from twitter. In Proceedings of the 18th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, KDD '12, pages 1104–1112, New York, NY, USA, 2012. ACM.
- [505] Tim Rocktäschel, Matko Bosnjak, Sameer Singh, and Sebastian Riedel. Low-dimensional embeddings of logic. In Proceedings of the ACL 2014 Workshop on Semantic Parsing, pages 45–49, 2014.
- [506] Phillip Rogaway. The moral character of cryptographic work. URL: http://web. cs. ucdavis. edu/~rogaway/papers/moral. pdf, 2015.

- [507] Anna Rohrbach, Marcus Rohrbach, and Bernt Schiele. The long-short story of movie description. CoRR, abs/1506.01698, 2015.
- [508] Anna Rohrbach, Atousa Torabi, Marcus Rohrbach, Niket Tandon, Christopher Pal, Hugo Larochelle, Aaron Courville, and Bernt Schiele. Movie description. arXiv preprint arXiv:1605.03705, 2016.
- [509] Marcus Rohrbach. Attributes as semantic units between natural language and visual recognition. arXiv preprint arXiv:1604.03249, 2016.
- [510] Stephen Roller and Katrin Erk. Relations such as hypernymy: Identifying and exploiting hearst patterns in distributional vectors for lexical entailment. arXiv preprint arXiv:1605.05433, 2016.
- [511] Daniel M Romero, Roderick I Swaab, Brian Uzzi, and Adam D Galinsky. Mimicry is presidential linguistic style matching in presidential debates and improved polling numbers. *Personality and Social Psychology Bulletin*, 41(10):1311–1319, 2015.
- [512] Michal Rosen-Zvi, Thomas Griffiths, Mark Steyvers, and Padhraic Smyth. The author-topic model for authors and documents. In *Proceedings of the* 20th conference on Uncertainty in artificial intelligence, pages 487–494. AUAI Press, 2004.
- [513] Subhro Roy and Dan Roth. Solving general arithmetic word problems. EMNLP, 2015.
- [514] Alexander M Rush and Michael Collins. A tutorial on dual decomposition and lagrangian relaxation for inference in natural language processing. Journal of Artificial Intelligence Research, 2012.
- [515] Mrinmaya Sachan, Avinava Dubey, Shashank Srivastava, Eric P Xing, and Eduard Hovy. Spatial compactness meets topical consistency: jointly modeling links and content for community detection. In *Proceedings of the 7th ACM international conference on Web search and data mining*, pages 503–512. ACM, 2014.
- [516] Kenji Sagae and Alon Lavie. Parser combination by reparsing. In Proceedings of the Human Language Technology Conference of the NAACL, Companion Volume: Short Papers, pages 129–132. Association for Computational Linguistics, 2006.
- [517] Diptikalyan Saha, Avrilia Floratou, Karthik Sankaranarayanan, Umar Farooq Minhas, Ashish R Mittal, and Fatma Özcan. Athena: an ontology-driven system for natural language querying over relational data stores. *Proceedings of the VLDB Endowment*, 9(12):1209–1220, 2016.
- [518] Keisuke Sakaguchi, Kevin Duh, Matt Post, and Benjamin Van Durme. Robsut wrod reocginiton via semi-character recurrent neural network. arXiv preprint arXiv:1608.02214, 2016.

- [519] Gavin Saldanha, Or Biran, Kathleen McKeown, and Alfio Gliozzo. An entity-focused approach to generating company descriptions. In Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 2: Short Papers), pages 243–248, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [520] Alexandre Salle, Aline Villavicencio, and Marco Idiart. Matrix factorization using window sampling and negative sampling for improved word representations. In *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 2: Short Papers)*, pages 419–424, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [521] Franco Salvetti, Stephen Lewis, and Christoph Reichenbach. Automatic opinion polarity classification of movie. *Colorado research in linguistics*, 17(1):2, 2004.
- [522] Cicero D Santos and Bianca Zadrozny. Learning character-level representations for part-of-speech tagging. In *Proceedings of the 31st International Conference on Machine Learning (ICML-14)*, pages 1818–1826, 2014.
- [523] Enrico Santus, Tin-Shing Chiu, Qin Lu, Alessandro Lenci, and Chu-Ren Huang. What a nerd! beating students and vector cosine in the esl and toefl datasets. arXiv preprint arXiv:1603.08701, 2016.
- [524] Abulhair Saparov and Tom M Mitchell. A probabilistic generative grammar for semantic parsing. arXiv preprint arXiv:1606.06361, 2016.
- [525] Andreas Scherbakov, Ekaterina Vylomova, Fei Liu, and Timothy Baldwin. From incremental meaning to semantic unit (phrase by phrase). arXiv preprint arXiv:1604.04873, 2016.
- [526] Frank Schilder, Blake Howald, and Ravi Kondadadi. Gennext: A consolidated domain adaptable nlg system. In *Proceedings of the 14th European Workshop on Natural Language Generation*, pages 178–182, 2013.
- [527] Allen Schmaltz, Alexander M. Rush, and Stuart Shieber. Word ordering without syntax. In Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing, pages 2319–2324, Austin, Texas, November 2016. Association for Computational Linguistics.
- [528] Michael Schmitz, Robert Bart, Stephen Soderland, Oren Etzioni, et al. Open language learning for information extraction. In *Proceedings of the 2012 Joint Conference on Empirical Methods in Natural Language Processing and Computational Natural Language Learning*, pages 523–534. Association for Computational Linguistics, 2012.
- [529] Holger Schwenk. Continuous space language models. Computer Speech & Language, 21(3):492-518, 2007.

- [530] Holger Schwenk, Daniel Dchelotte, and Jean-Luc Gauvain. Continuous space language models for statistical machine translation. In *Proceedings* of the COLING/ACL on Main conference poster sessions, pages 723–730. Association for Computational Linguistics, 2006.
- [531] Diarmuid O Séaghdha. Learning compound noun semantics. *University of Cambridge, Cambridge, UK*, 2008.
- [532] Diarmuid O Séaghdha and Anna Korhonen. Probabilistic distributional semantics with latent variable models. *Computational Linguistics*, 40(3):587–631, 2014.
- [533] Iulian V. Serban, Alessandro Sordoni, Yoshua Bengio, Aaron C. Courville, and Joelle Pineau. Hierarchical neural network generative models for movie dialogues. CoRR, abs/1507.04808, 2015.
- [534] Iulian Vlad Serban, Ryan Lowe, Laurent Charlin, and Joelle Pineau. A survey of available corpora for building data-driven dialogue systems. arXiv preprint arXiv:1512.05742, 2015.
- [535] Hendra Setiawan, Zhongqiang Huang, Jacob Devlin, Thomas Lamar, Rabih Zbib, Richard M. Schwartz, and John Makhoul. Statistical machine translation features with multitask tensor networks. CoRR, abs/1506.00698, 2015.
- [536] Aliaksei Severyn, Massimo Nicosia, Gianni Barlacchi, and Alessandro Moschitti. Distributional neural networks for automatic resolution of crossword puzzles. *Volume 2: Short Papers*, page 199.
- [537] Elaheh ShafieiBavani, Mohammad Ebrahimi, Raymond Wong, and Fang Chen. On improving informativity and grammaticality for multi-sentence compression. arXiv preprint arXiv:1605.02150, 2016.
- [538] Dafna Shahaf, Eric Horvitz, and Robert Mankoff. Inside jokes: Identifying humorous cartoon captions. In *Proceedings of the 21th ACM SIGKDD In*ternational Conference on Knowledge Discovery and Data Mining, pages 1065–1074. ACM, 2015.
- [539] Jingbo Shang, Jialu Liu, Meng Jiang, Xiang Ren, Clare R Voss, and Jiawei Han. Automated phrase mining from massive text corpora. arXiv preprint arXiv:1702.04457, 2017.
- [540] Ehsan Shareghi, Matthias Petri, Gholamreza Haffari, and Trevor Cohn. Fast, small and exact: Infinite-order language modelling with compressed suffix trees. arXiv preprint arXiv:1608.04465, 2016.
- [541] Sachiko Shudo. How even revises expectation in a scalar model: Analogy with japanese mo. In *PACLIC*, pages 74–86, 2008.

- [542] Ekaterina Shutova, Douwe Kiela, and Jean Maillard. Black holes and white rabbits: Metaphor identification with visual features. 2016.
- [543] Ekaterina Shutova, Douwe Kiela, and Jean Maillard. Black holes and white rabbits: Metaphor identification with visual features. In *Proc. of the 2016 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies*, pages 160–170, 2016.
- [544] Ekaterina Shutova and Patricia Lichtenstein. Psychologically motivated text mining. arXiv preprint arXiv:1609.09019, 2016.
- [545] Vered Shwartz, Yoav Goldberg, and Ido Dagan. Improving hypernymy detection with an integrated path-based and distributional method. arXiv preprint arXiv:1603.06076, 2016.
- [546] Vered Shwartz, Yoav Goldberg, and Ido Dagan. Improving hypernymy detection with an integrated path-based and distributional method. In Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers), pages 2389–2398, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [547] Yanchuan Sim, Bryan R. Routledge, and Noah A. Smith. The utility of text: The case of amicus briefs and the supreme court. CoRR, abs/1409.7985, 2014.
- [548] Andrei Simion, Michael Collins, and Cliff Stein. Towards a convex hmm surrogate for word alignment. In Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing, pages 531–540, Austin, Texas, November 2016. Association for Computational Linguistics.
- [549] Rion Snow, Daniel Jurafsky, and Andrew Y Ng. Learning syntactic patterns for automatic hypernym discovery. Advances in Neural Information Processing Systems 17, 2004.
- [550] Rion Snow, Brendan O'Connor, Daniel Jurafsky, and Andrew Y Ng. Cheap and fast—but is it good?: evaluating non-expert annotations for natural language tasks. In Proceedings of the conference on empirical methods in natural language processing, pages 254–263. Association for Computational Linguistics, 2008.
- [551] Benjamin Snyder and Regina Barzilay. Multiple aspect ranking using the good grief algorithm. In *HLT-NAACL*, pages 300–307, 2007.
- [552] Richard Socher, Milind Ganjoo, Hamsa Sridhar, Osbert Bastani, Christopher D. Manning, and Andrew Y. Ng. Zero-shot learning through cross-modal transfer. CoRR, abs/1301.3666, 2013.

- [553] Anders Søgaard and Yoav Goldberg. Deep multi-task learning with low level tasks supervised at lower layers. In *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 2: Short Papers)*, pages 231–235, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [554] Linfeng Song, Yue Zhang, Xiaochang Peng, Zhiguo Wang, and Daniel Gildea. Amr-to-text generation as a traveling salesman problem. In Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing, pages 2084–2089, Austin, Texas, November 2016. Association for Computational Linguistics.
- [555] Min Song and Tamy Chambers. Text mining with the stanford corenlp. In *Measuring Scholarly Impact*, pages 215–234. Springer, 2014.
- [556] Yangqiu Song and Dan Roth. Unsupervised sparse vector densification for short text similarity. *Proc. North Am. Chapter Assoc. Computat. Linguistics*, pages 1275–1280, 2015.
- [557] Alessandro Sordoni, Michel Galley, Michael Auli, Chris Brockett, Yangfeng Ji, Margaret Mitchell, Jian-Yun Nie, Jianfeng Gao, and Bill Dolan. A neural network approach to context-sensitive generation of conversational responses. CoRR, abs/1506.06714, 2015.
- [558] Alfred Spector, Peter Norvig, and Slav Petrov. Google's hybrid approach to research. *Communications of the ACM*, 55(7):34–37, 2012.
- [559] Valentin I Spitkovsky, Hiyan Alshawi, and Daniel Jurafsky. From baby steps to leapfrog: How less is more in unsupervised dependency parsing. In Human Language Technologies: The 2010 Annual Conference of the North American Chapter of the Association for Computational Linguistics, pages 751–759. Association for Computational Linguistics, 2010.
- [560] Vivek Srikumar and Dan Roth. Modeling semantic relations expressed by prepositions. Transactions of the Association for Computational Linguistics, 1:231–242, 2013.
- [561] Christian Stab and Iryna Gurevych. Parsing argumentation structures in persuasive essays. arXiv preprint arXiv:1604.07370, 2016.
- [562] Efstathios Stamatatos. A survey of modern authorship attribution methods. Journal of the American Society for information Science and Technology, 60(3):538–556, 2009.
- [563] Gabriel Stanovsky and Ido Dagan. Annotating and predicting non-restrictive noun phrase modifications. In *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 1256–1265, Berlin, Germany, August 2016. Association for Computational Linguistics.

- [564] Gabriel Stanovsky and Ido Dagan. Creating a large benchmark for open information extraction. In *Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing*, pages 2300–2305, Austin, Texas, November 2016. Association for Computational Linguistics.
- [565] Gabriel Stanovsky, Jessica Ficler, Ido Dagan, and Yoav Goldberg. Getting more out of syntax with props, 2016.
- [566] Mark Steedman. A very short introduction to ccg. Unpublished paper. http://www.coqsci. ed. ac. uk/steedman/paper. html, 1996.
- [567] Mark Steedman and Jason Baldridge. Combinatory categorial grammar. Non-Transformational Syntax: Formal and Explicit Models of Grammar. Wiley-Blackwell, 2011.
- [568] Jiri Stetina and Makoto Nagao. Corpus based pp attachment ambiguity resolution with a semantic dictionary. In Proceedings of the fifth workshop on very large corpora. Citeseer, 1997.
- [569] Karl Stratos and Michael Collins. Simple semi-supervised pos tagging. In Proceedings of NAACL-HLT, pages 79–87, 2015.
- [570] Karl Stratos, Do-kyum Kim, Michael Collins, and Daniel J Hsu. A spectral algorithm for learning class-based n-gram models of natural language. In UAI, pages 762–771. Citeseer, 2014.
- [571] Qi Su, Dmitry Pavlov, Jyh-Herng Chow, and Wendell C Baker. Internetscale collection of human-reviewed data. In *Proceedings of the 16th inter*national conference on World Wide Web, pages 231–240. ACM, 2007.
- [572] Md Arafat Sultan, Jordan Boyd-Graber, and Tamara Sumner. Bayesian supervised domain adaptation for short text similarity. In Proceedings of the 2016 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, pages 927– 936, San Diego, California, June 2016. Association for Computational Linguistics.
- [573] Md Arafat Sultan, Vittorio Castelli, and Radu Florian. A joint model for answer sentence ranking and answer extraction. *Transactions of the Association for Computational Linguistics*, 4:113–125, 2016.
- [574] Fei Sun, Jiafeng Guo, Yanyan Lan, Jun Xu, and Xueqi Cheng. Semantic regularities in document representations. arXiv preprint arXiv:1603.07603, 2016.
- [575] Mihai Surdeanu, Tom Hicks, and Marco Antonio Valenzuela-Escarcega. Two practical rhetorical structure theory parsers. In *Proceedings of the 2015 Conference of the North American Chapter of the Association for Computational Linguistics: Demonstrations*, pages 1–5, Denver, Colorado, June 2015. Association for Computational Linguistics.

- [576] Charles Sutton and Andrew McCallum. An introduction to conditional random fields for relational learning. *Introduction to statistical relational learning*, pages 93–128, 2006.
- [577] Charles Sutton and Andrew McCallum. An introduction to conditional random fields. *Machine Learning*, 4(4):267–373, 2011.
- [578] Charles Sutton and Andrew McCallum. An introduction to conditional random fields. Found. Trends Mach. Learn., 4(4):267–373, April 2012.
- [579] Yasuhiro Suzuki, Hiroya Takamura, and Manabu Okumura. Application of semi-supervised learning to evaluative expression classification. In *International Conference on Intelligent Text Processing and Computational Linguistics*, pages 502–513. Springer, 2006.
- [580] Maite Taboada, Caroline Anthony, and Kimberly Voll. Methods for creating semantic orientation dictionaries. In Proceedings of the 5th Conference on Language Resources and Evaluation (LREC06), pages 427–432, 2006.
- [581] Maite Taboada, Julian Brooke, Milan Tofiloski, Kimberly Voll, and Manfred Stede. Lexicon-based methods for sentiment analysis. *Computational linguistics*, 37(2):267–307, 2011.
- [582] Hiroya Takamura, Takashi Inui, and Manabu Okumura. Latent variable models for semantic orientations of phrases. In *EACL*, 2006.
- [583] Chenhao Tan, Vlad Niculae, Cristian Danescu-Niculescu-Mizil, and Lillian Lee. Winning arguments: Interaction dynamics and persuasion strategies in good-faith online discussions. arXiv preprint arXiv:1602.01103, 2016.
- [584] Kumiko Tanaka-Ishii and Shunsuke Aihara. Computational constancy measures of textsyule's k and rényi's entropy. Computational Linguistics, 2015.
- [585] Lei Tang and Huan Liu. Leveraging social media networks for classification. *Data Mining and Knowledge Discovery*, 23(3):447–478, 2011.
- [586] Xuewei Tang and Xiaojun Wan. Learning bilingual embedding model for cross-language sentiment classification. In Web Intelligence (WI) and Intelligent Agent Technologies (IAT), 2014 IEEE/WIC/ACM International Joint Conferences on, volume 2, pages 134–141. IEEE, 2014.
- [587] Makarand Tapaswi, Yukun Zhu, Rainer Stiefelhagen, Antonio Torralba, Raquel Urtasun, and Sanja Fidler. Movieqa: Understanding stories in movies through question-answering. arXiv preprint arXiv:1512.02902, 2015.
- [588] Makarand Tapaswi, Yukun Zhu, Rainer Stiefelhagen, Antonio Torralba, Raquel Urtasun, and Sanja Fidler. Moviega: Understanding stories in

- movies through question-answering. In *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition*, pages 4631–4640, 2016.
- [589] Yee Whye Teh. A bayesian interpretation of interpolated kneser-ney. Technical report, TRA2/06, 2006.
- [590] Yee Whye Teh. A hierarchical bayesian language model based on pitmanyor processes. In *Proceedings of the 21st International Conference on* Computational Linguistics and the 44th annual meeting of the Association for Computational Linguistics, pages 985–992. Association for Computational Linguistics, 2006.
- [591] Joshua B Tenenbaum, Vin De Silva, and John C Langford. A global geometric framework for nonlinear dimensionality reduction. *science*, 290(5500):2319–2323, 2000.
- [592] Matt Thomas, Bo Pang, and Lillian Lee. Get out the vote: Determining support or opposition from congressional floor-debate transcripts. In *Proceedings of the 2006 conference on empirical methods in natural language processing*, pages 327–335. Association for Computational Linguistics, 2006.
- [593] Kristina Toutanova and Christopher D Manning. Enriching the knowledge sources used in a maximum entropy part-of-speech tagger. In Proceedings of the 2000 Joint SIGDAT conference on Empirical methods in natural language processing and very large corpora: held in conjunction with the 38th Annual Meeting of the Association for Computational Linguistics-Volume 13, pages 63–70. Association for Computational Linguistics, 2000.
- [594] Claude Touzet, Christopher Kermorvant, and Hervé Glotin. A biologically plausible som representation of the orthographic form of 50,000 french words. In *Advances in Self-Organizing Maps and Learning Vector Quantization*, pages 303–312. Springer, 2014.
- [595] Stephen Tratz and Eduard Hovy. A taxonomy, dataset, and classifier for automatic noun compound interpretation. In *Proceedings of the 48th Annual Meeting of the Association for Computational Linguistics*, pages 678–687. Association for Computational Linguistics, 2010.
- [596] Stephen Tratz and Eduard H Hovy. Automatic interpretation of the english possessive. In *ACL* (1), pages 372–381, 2013.
- [597] Joseph Turian, Lev Ratinov, and Yoshua Bengio. Word representations: A simple and general method for semi-supervised learning. In Proceedings of the 48th Annual Meeting of the Association for Computational Linguistics, ACL '10, pages 384–394, Stroudsburg, PA, USA, 2010. Association for Computational Linguistics.

- [598] Peter D. Turney. Distributional semantics beyond words: Supervised learning of analogy and paraphrase. *CoRR*, abs/1310.5042, 2013.
- [599] Peter D Turney and Michael L Littman. Measuring praise and criticism: Inference of semantic orientation from association. ACM Transactions on Information Systems (TOIS), 21(4):315–346, 2003.
- [600] Peter D. Turney and Patrick Pantel. From frequency to meaning: Vector space models of semantics. J. Artif. Int. Res., 37(1):141–188, January 2010.
- [601] Blase Ur, Melwyn Pak Yong Ho, Stephen Brawner, Jiyun Lee, Sarah Mennicken, Noah Picard, Diane Schulze, and Michael L Littman. Trigger-action programming in the wild: An analysis of 200,000 ifftt recipes. In Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems, pages 3227–3231. ACM, 2016.
- [602] Jakob Uszkoreit, Jay M Ponte, Ashok C Popat, and Moshe Dubiner. Large scale parallel document mining for machine translation. In *Proceedings of the 23rd International Conference on Computational Linguistics*, pages 1101–1109. Association for Computational Linguistics, 2010.
- [603] Marco Antonio Valenzuela-Escarcega, Gustave Hahn-Powell, and Mihai Surdeanu. Description of the odin event extraction framework and rule language. CoRR, abs/1509.07513, 2015.
- [604] Daniele Vannella, Tiziano Flati, and Roberto Navigli. Wosit: A word sense induction toolkit for search result clustering and diversification. In *ACL (System Demonstrations)*, pages 67–72, 2014.
- [605] Saúl Vargas. New approaches to diversity and novelty in recommender systems. In Fourth BCS-IRSG symposium on future directions in information access (FDIA 2011), Koblenz, volume 31, 2011.
- [606] Leonid Velikovich, Sasha Blair-Goldensohn, Kerry Hannan, and Ryan Mc-Donald. The viability of web-derived polarity lexicons. In Human Language Technologies: The 2010 Annual Conference of the North American Chapter of the Association for Computational Linguistics, pages 777–785. Association for Computational Linguistics, 2010.
- [607] Subhashini Venugopalan, Lisa Anne Hendricks, Marcus Rohrbach, Raymond Mooney, Trevor Darrell, and Kate Saenko. Captioning images with diverse objects. arXiv preprint arXiv:1606.07770, 2016.
- [608] Patrick Verga, David Belanger, Emma Strubell, Benjamin Roth, and Andrew McCallum. Multilingual relation extraction using compositional universal schema. CoRR, abs/1511.06396, 2015.

- [609] Patrick Verga, David Belanger, Emma Strubell, Benjamin Roth, and Andrew McCallum. Multilingual relation extraction using compositional universal schema. In Proceedings of the 2016 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, pages 886–896, San Diego, California, June 2016. Association for Computational Linguistics.
- [610] Patrick Verga, Arvind Neelakantan, and Andrew McCallum. Generalizing to unseen entities and entity pairs with row-less universal schema. arXiv preprint arXiv:1606.05804, 2016.
- [611] Petro Verkhogliad. Implementing fuf in nltk, 2010.
- [612] Luke Vilnis and Andrew McCallum. Word representations via gaussian embedding. arXiv preprint arXiv:1412.6623, 2014.
- [613] Andreas Vlachos and Stephen Clark. A new corpus and imitation learning framework for context-dependent semantic parsing. Transactions of the Association for Computational Linguistics, 2:547–559, 2014.
- [614] Ngoc Phuoc An Vo and Octavian Popescu. A preliminary evaluation of the impact of syntactic structure in semantic textual similarity and semantic relatedness tasks. In NAACL-HLT 2015 Student Research Workshop (SRW), page 64, 2015.
- [615] Stephan Vogel, Hermann Ney, and Christoph Tillmann. Hmm-based word alignment in statistical translation. In *Proceedings of the 16th conference on Computational linguistics-Volume 2*, pages 836–841. Association for Computational Linguistics, 1996.
- [616] Svitlana Volkova and Yoram Bachrach. Inferring perceived demographics from user emotional tone and user-environment emotional contrast. In Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics, ACL, 2016.
- [617] Ivan Vulić, Daniela Gerz, Douwe Kiela, Felix Hill, and Anna Korhonen. Hyperlex: A large-scale evaluation of graded lexical entailment. arXiv preprint arXiv:1608.02117, 2016.
- [618] Mengting Wan, Di Wang, Matt Goldman, Matt Taddy, Justin Rao, Jie Liu, Dimitrios Lymberopoulos, and Julian McAuley. Modeling consumer preferences and price sensitivities from large-scale grocery shopping transaction logs. In *Proceedings of the 26th International Conference on World Wide Web*, pages 1103–1112. International World Wide Web Conferences Steering Committee, 2017.
- [619] Chenguang Wang, Yangqiu Song, Dan Roth, Ming Zhang, and Jiawei Han. World knowledge as indirect supervision for document clustering. arXiv preprint arXiv:1608.00104, 2016.

- [620] Chuan Wang, Sameer Pradhan, Nianwen Xue, Xiaoman Pan, and Heng Ji. Camr at semeval-2016 task 8: An extended transition-based amr parser. Proceedings of SemEval, pages 1173–1178, 2016.
- [621] Chuan Wang, Nianwen Xue, Sameer Pradhan, and Sameer Pradhan. A transition-based algorithm for amr parsing. In Proceedings of the 2015 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, pages 366–375, 2015.
- [622] Hai Wang and Mohit Bansal Kevin Gimpel David McAllester. Machine comprehension with syntax, frames, and semantics. Volume 2: Short Papers, page 700, 2015.
- [623] Sida Wang and Christopher D Manning. Baselines and bigrams: Simple, good sentiment and topic classification. In *Proceedings of the 50th Annual Meeting of the Association for Computational Linguistics: Short Papers-Volume 2*, pages 90–94. Association for Computational Linguistics, 2012.
- [624] Sida I Wang, Percy Liang, and Christopher D Manning. Learning language games through interaction. arXiv preprint arXiv:1606.02447, 2016.
- [625] Sida I. Wang, Percy Liang, and Christopher D. Manning. Learning language games through interaction. In Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers), pages 2368–2378, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [626] Suhang Wang, Jiliang Tang, Yilin Wang, and Huan Liu. Exploring implicit hierarchical structures for recommender systems. In Proceedings of 24th International Joint Conference on Artificial Intelligence, 2015.
- [627] Tian Wang and Kyunghyun Cho. Larger-context language modelling. CoRR, abs/1511.03729, 2015.
- [628] William Yang Wang and Miaomiao Wen. I can has cheezburger? a non-paranormal approach to combining textual and visual information for predicting and generating popular meme descriptions. In *Proceedings of the 2015 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies*, volume 2, 2015.
- [629] Yu Wang, Lihui Wu, and Hongyu Shao. Clusters merging method for short texts clustering. *Open Journal of Social Sciences*, 2(09):186, 2014.
- [630] Yushi Wang, Jonathan Berant, and Percy Liang. Building a semantic parser overnight. In Association for Computational Linguistics (ACL), 2015.

- [631] Zhiguo Wang, Haitao Mi, and Abraham Ittycheriah. Sentence similarity learning by lexical decomposition and composition. arXiv preprint arXiv:1602.07019, 2016.
- [632] David Weiss, Chris Alberti, Michael Collins, and Slav Petrov. Structured training for neural network transition-based parsing. CoRR, abs/1506.06158, 2015.
- [633] Keenon Werling, Gabor Angeli, and Christopher D. Manning. Robust subgraph generation improves abstract meaning representation parsing. In Proceedings of the 53rd Annual Meeting of the Association for Computational Linguistics and the 7th International Joint Conference on Natural Language Processing (Volume 1: Long Papers), pages 982–991, Beijing, China, July 2015. Association for Computational Linguistics.
- [634] Robert West, Hristo S Paskov, Jure Leskovec, and Christopher Potts. Exploiting social network structure for person-to-person sentiment analysis. Transactions of the Association for Computational Linguistics, 2014.
- [635] Jason Weston, Antoine Bordes, Sumit Chopra, and Tomas Mikolov. Towards ai-complete question answering: A set of prerequisite toy tasks. CoRR, abs/1502.05698, 2015.
- [636] Jason Weston, Antoine Bordes, Sumit Chopra, Alexander M Rush, Bart van Merriënboer, Armand Joulin, and Tomas Mikolov. Towards aicomplete question answering: A set of prerequisite toy tasks. arXiv preprint arXiv:1502.05698, 2015.
- [637] John Whitfield. Collaboration: Group theory. Nature, 2008.
- [638] Janyce Wiebe. Learning subjective adjectives from corpora. In AAAI/IAAI, pages 735–740, 2000.
- [639] Janyce Wiebe, Theresa Wilson, and Matthew Bell. Identifying collocations for recognizing opinions. In Proceedings of the ACL-01 Workshop on Collocation: Computational Extraction, Analysis, and Exploitation, pages 24–31, 2001.
- [640] John Wieting, Mohit Bansal, Kevin Gimpel, and Karen Livescu. From paraphrase database to compositional paraphrase model and back. *Transactions of the Association for Computational Linquistics*, 3:345–358, 2015.
- [641] John Wieting, Mohit Bansal, Kevin Gimpel, and Karen Livescu. From paraphrase database to compositional paraphrase model and back. arXiv preprint arXiv:1506.03487, 2015.
- [642] Shomir Wilson, Florian Schaub, Aswarth Abhilash Dara, Frederick Liu, Sushain Cherivirala, Pedro Giovanni Leon, Mads Schaarup Andersen, Sebastian Zimmeck, Kanthashree Mysore Sathyendra, N. Cameron Russell, Thomas B. Norton, Eduard Hovy, Joel Reidenberg, and Norman Sadeh.

- The creation and analysis of a website privacy policy corpus. In *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 1330–1340, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [643] Sam Wiseman and Alexander M. Rush. Sequence-to-sequence learning as beam-search optimization. In *Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing*, pages 1296–1306, Austin, Texas, November 2016. Association for Computational Linguistics.
- [644] Sam Wiseman, Alexander M. Rush, and Stuart M. Shieber. Learning global features for coreference resolution. In Proceedings of the 2016 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, pages 994–1004, San Diego, California, June 2016. Association for Computational Linguistics.
- [645] Sam Wiseman, Alexander M Rush, and Stuart M Shieber. Learning global features for coreference resolution. arXiv preprint arXiv:1604.03035, 2016.
- [646] Jacob O Wobbrock. Catchy titles are good: But avoid being cute. 2015.
- [647] Travis Wolfe, Mark Dredze, James Mayfield, Paul McNamee, Craig Harman, Tim Finin, and Benjamin Van Durme. Interactive knowledge base population. *CoRR*, abs/1506.00301, 2015.
- [648] Travis Wolfe, Mark Dredze, and Benjamin Van Durme. Predicate argument alignment using a global coherence model. In *Proceedings of the 2015 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies*, pages 11–20, Denver, Colorado, May–June 2015. Association for Computational Linguistics.
- [649] Dekai Wu. Stochastic inversion transduction grammars and bilingual parsing of parallel corpora. *Comput. Linguist.*, 23(3):377–403, September 1997.
- [650] Fei Wu and Daniel S Weld. Open information extraction using wikipedia. In Proceedings of the 48th Annual Meeting of the Association for Computational Linguistics, pages 118–127. Association for Computational Linguistics, 2010.
- [651] Lin Wu, Yang Wang, John Shepherd, and Xiang Zhao. An optimization method for proportionally diversifying search results. In *Pacific-Asia Conference on Knowledge Discovery and Data Mining*, pages 390–401. Springer, 2013.
- [652] Chang Xu, Yalong Bai, Jiang Bian, Bin Gao, Gang Wang, Xiaoguang Liu, and Tie-Yan Liu. Rc-net: A general framework for incorporating knowledge into word representations. In Proceedings of the 23rd ACM International Conference on Conference on Information and Knowledge Management, pages 1219–1228. ACM, 2014.

- [653] Wei Xu, Alan Ritter, Chris Callison-Burch, William B Dolan, and Yangfeng Ji. Extracting lexically divergent paraphrases from twitter. Transactions of the Association for Computational Linguistics, 2:435–448, 2014.
- [654] Diyi Yang, Alon Lavie, Chris Dyer, and Eduard H Hovy. Humor recognition and humor anchor extraction. In EMNLP, pages 2367–2376. Citeseer, 2015.
- [655] Weiwei Yang, Jordan Boyd-Graber, and Philip Resnik. A discriminative topic model using document network structure. In *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 686–696, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [656] Zhilin Yang, Ruslan Salakhutdinov, and William Cohen. Multi-task crosslingual sequence tagging from scratch. arXiv preprint arXiv:1603.06270, 2016.
- [657] Zichao Yang, Xiaodong He, Jianfeng Gao, Li Deng, and Alexander J. Smola. Stacked attention networks for image question answering. CoRR, abs/1511.02274, 2015.
- [658] Li Yao, Nicolas Ballas, KyungHyun Cho, John R. Smith, and Yoshua Bengio. Trainable performance upper bounds for image and video captioning. CoRR, abs/1511.04590, 2015.
- [659] Li Yao, Atousa Torabi, Kyunghyun Cho, Nicolas Ballas, Christopher Pal, Hugo Larochelle, and Aaron Courville. Describing videos by exploiting temporal structure. In *Proceedings of the IEEE International Conference* on Computer Vision, pages 4507–4515, 2015.
- [660] Limin Yao, Sebastian Riedel, and Andrew McCallum. Unsupervised relation discovery with sense disambiguation. In Proceedings of the 50th Annual Meeting of the Association for Computational Linguistics: Long Papers-Volume 1, pages 712–720. Association for Computational Linguistics, 2012.
- [661] Jeonghee Yi, Tetsuya Nasukawa, Razvan Bunescu, and Wayne Niblack. Sentiment analyzer: Extracting sentiments about a given topic using natural language processing techniques. In *Data Mining*, 2003. ICDM 2003. Third IEEE International Conference on, pages 427–434. IEEE, 2003.
- [662] Wenpeng Yin and Hinrich Schütze. Learning word meta-embeddings. In Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers), pages 1351–1360, Berlin, Germany, August 2016. Association for Computational Linguistics.
- [663] Dani Yogatama and Noah A. Smith. Bayesian optimization of text representations. CoRR, abs/1503.00693, 2015.

- [664] Peter Young, Alice Lai, Micah Hodosh, and Julia Hockenmaier. From image descriptions to visual denotations: New similarity metrics for semantic inference over event descriptions. Transactions of the Association for Computational Linguistics, 2:67–78, 2014.
- [665] Haonan Yu, N Siddharth, Andrei Barbu, and Jeffrey Mark Siskind. A compositional framework for grounding language inference, generation, and acquisition in video. J. Artif. Intell. Res. (JAIR), 52:601-713, 2015.
- [666] Haonan Yu and Jeffrey Mark Siskind. Grounded language learning from video described with sentences. In Proceedings of the 51st Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers), pages 53–63, Sofia, Bulgaria, August 2013. Association for Computational Linguistics.
- [667] Juntao Yu and Bernd Bohnet. Dependency language models for transition-based dependency parsing. arXiv preprint arXiv:1607.04982, 2016.
- [668] Licheng Yu, Eunbyung Park, Alexander C. Berg, and Tamara L. Berg. Visual madlibs: Fill in the blank image generation and question answering. CoRR, abs/1506.00278, 2015.
- [669] Jakub Zavrel, Walter Daelemans, Jorn Veenstra, et al. Resolving pp attachment ambiguities with memory-based learning. In CoNLL, pages 136– 144, 1997.
- [670] John M Zelle and Raymond J Mooney. Learning to parse database queries using inductive logic programming. In *Proceedings of the national confer*ence on artificial intelligence, pages 1050–1055, 1996.
- [671] Luke S Zettlemoyer and Michael Collins. Learning to map sentences to logical form: Structured classification with probabilistic categorial grammars. arXiv preprint arXiv:1207.1420, 2012.
- [672] Congle Zhang, Stephen Soderland, and Daniel S Weld. Exploiting parallel news streams for unsupervised event extraction. Transactions of the Association for Computational Linguistics, 3:117–129, 2015.
- [673] Justine Zhang, Ravi Kumar, Sujith Ravi, and Cristian Danescu-Niculescu-Mizil. Conversational flow in oxford-style debates. In Proceedings of the 2016 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, pages 136–141, San Diego, California, June 2016. Association for Computational Linguistics.
- [674] Justine Zhang, Ravi Kumar, Sujith Ravi, and Cristian Danescu-Niculescu-Mizil. Conversational flow in oxford-style debates. arXiv preprint arXiv:1604.03114, 2016.

- [675] Xingxing Zhang, Jianpeng Cheng, and Mirella Lapata. Dependency parsing as head selection. arXiv preprint arXiv:1606.01280, 2016.
- [676] Yue Zhang and Stephen Clark. Discriminative syntax-based word ordering for text generation. *Comput. Linguist.*, 41(3):503–538, September 2015.
- [677] Yue Zhang and Stephen Clark. Discriminative syntax-based word ordering for text generation. *Computational Linguistics*, 41(3):503–538, 2015.
- [678] Shaojun Zhao and Dekang Lin. A nearest-neighbor method for resolving pp-attachment ambiguity. In *International Conference on Natural Language Processing*, pages 545–554. Springer, 2004.
- [679] Wayne Xin Zhao, Jing Jiang, Jing He, Yang Song, Palakorn Achananuparp, Ee-Peng Lim, and Xiaoming Li. Topical keyphrase extraction from twitter. In *Proceedings of the 49th Annual Meeting of the Association for Computational Linguistics: Human Language Technologies-Volume 1*, pages 379–388. Association for Computational Linguistics, 2011.
- [680] Xin Zhao, Jing Jiang, Jing He, Yang Song, Palakorn Achanauparp, Ee-Peng Lim, and Xiaoming Li. Topical keyphrase extraction from twitter. In Proceedings of the 49th Annual Meeting of the Association for Computational Linguistics: Human Language Technologies, pages 379–388, Portland, Oregon, USA, June 2011. Association for Computational Linguistics.
- [681] Bolei Zhou, Yuandong Tian, Sainbayar Sukhbaatar, Arthur Szlam, and Rob Fergus. Simple baseline for visual question answering. arXiv preprint arXiv:1512.02167, 2015.
- [682] Yang Zhou, Ling Liu, Chang-Shing Perng, Anca Sailer, Ignacio Silva-Lepe, and Zhiyuan Su. Ranking services by service network structure and service attributes. In *Web Services (ICWS)*, 2013 IEEE 20th International Conference on, pages 26–33. IEEE, 2013.
- [683] Yukun Zhu, Ryan Kiros, Richard S. Zemel, Ruslan Salakhutdinov, Raquel Urtasun, Antonio Torralba, and Sanja Fidler. Aligning books and movies: Towards story-like visual explanations by watching movies and reading books. CoRR, abs/1506.06724, 2015.