Natural Language Engineering **8** (4): 275–277. © 2002 Cambridge University Press
DOI: 10.1017/S1351324902003066 Printed in the United Kingdom

Dedication to William A. Gale

KENNETH CHURCH

(*Received 29 August 2002*)

This issue is dedicated to William A. Gale

Gale, as he liked to be called by his friends and family, had extremely broad interests, both professionally and otherwise. His professional career at Bell Labs included radio astronomy, economics, statistics and computational linguistics. He always had lots of collaborators because he was such a joy to work with:

> I only ever really knew Bill via e-mail, yet he represented one of the most significant academic contacts I've ever had. The Good-Turing paper that we collaborated on was definitely one of the most fulfilling high points of my publishing career – apart from any intellectual value it may have, it was more fun than almost anything else I've worked on in my professional role. It was a privilege for me that Bill accepted me as a partner on that task. (Geoffrey Sampson, personal communication).

Gale had a remarkable tendency to jump start research areas in computational linguistics (and elsewhere) that would later become extremely popular. Some examples include:

- Parameter estimation
- Word sense disambiguation
- Parallel corpus alignment and text classification
- Lexical statistics

Always curious, and always a spectacular teacher, he would start his collaborator going on some new topic that would keep them busy for years to come, while he wandered off to create yet another new research area. This special issue (and the special interest group SIGLEX) is largely an outgrowth of the year or two that he spent having a good time playing with word senses in the early 1990s. There was a lot to learn from him, both as a scientist and as a person.

Selected publications of William A. Gale

Parameter estimation

Church, Kenneth W. and Gale, William A. (1989) Enhanced Good-Turing and Cat-Cal: Two new methods for estimating probabilities of English bigrams. *Second DARPA Workshop on Speech and Natural Language*, Cape Cod.

Gale, William A. and Church, Kenneth W. (1990) Poor estimates of context are worse than none. *Proceedings of DARPA Speech and Natural Language Workshop*, Hidden Valley, Pennsylvania.

https://doi.org/10.1017/S1351324902003066 Published online by Cambridge University Press

Church, Kenneth W. and Gale, William A. (1991) A comparison of the enhanced Good-Turing and deleted estimation methods for estimating probabilities of English bigrams. *Computer Speech & Language* **5**(1): 19–54.
Gale, William A. and Church, Kenneth W. (1994) What's wrong with adding one? In: Oostdijk N. and de Haan P., editors, *Corpus-Based Research into Language: In honour of Jan Aarts*, pp. 189–200. Amsterdam: Rodolpi.
Gale, William A. and Sampson, Geoffrey (1995) Good-Turing frequency estimation without tears. *J. Quantitative Linguistics* **2**(3): 217–237.
Church, Kenneth W. and Gale, William A. (1995) Poisson mixtures. *Natural Language Engineering* **1**(2): 163–190.
Church, Kenneth W. and Gale, William A. (1999) Inverse document frequency (IDF): A measure of deviations from Poisson. *Proceedings Third Workshop on Very Large Corpora*, pp. 121–130.

Word sense disambiguation

Gale, William A., Church, Kenneth W. and Yarowsky, David (1992) A method for disambiguating word senses in a large corpus. *Computers & Humanities* **26**: 415–439.
Gale, William A., Church, Kenneth W. and Yarowsky, David (1992) Estimating upper and lower bounds on the performance of word-sense disambiguation programs. *Proceedings 30th Annual Meeting of the Association for Computational Linguistics*, pp. 249–256. Newark, Delaware.
Gale, William A., Church, Kenneth W. and Yarowsky, David (1992) One sense per discourse. *Proceedings of the DARPA Speech and Natural Language Workshop*, pp. 233–237. New York.
Gale, William A., Church, Kenneth W. and Yarowsky, David (1992) Using bilingual materials to develop word sense disambiguation methods. *Fourth International Conference on Theoretical and Methodological Issues in Machine Translation*, pp. 101–112. Montreal.
Gale, William A., Church, Kenneth W. and Yarowsky, David (1995) Discrimination decisions for 100,000 dimensional spaces. *Ann. Operations Res.* **55**: 323–344.

Parallel corpus alignment and text classification

Gale, William A. and Church, Kenneth W. (1991) A program for aligning sentences in bilingual corpora. *Proceedings of the 29th Annual Meeting of the Association for Computational Linguistics*. Berkeley, CA.
Gale, William A. and Church, Kenneth W. (1991) Identifying word correspondences in parallel texts. *Proceedings of the DARPA Speech an Natural Language Workshop*.
Church, Kenneth W. and Gale, William A. (1991) Concordances for parallel text. *Proceedings of the Seventh Annual Conference of the UW Centre for the New OED and Text Research*, pp. 40–62. Oxford.
Dagan, Ido, Church, Kenneth W. and Gale, William A. (1993) Robust bilingual word alignment for machine aided translation. *Proceedings of the Workshop on Very Large Corpora*, pp. 1–8. Columbus, OH.
Lewis, David D. and Gale, William A. (1994) A sequential algorithm for training text classifiers. *Proceedings 17th Annual International ACM-SIGIR Conference on Research and Development in Information Retrieval*, pp. 3–12. Dublin, Ireland.

Lexical statistics

Church, Kenneth W., Gale, William A., Hanks, Patrick and Hindle, Donald (1989) Parsing, word associations and typical predicate-argument relations. *International Workshop on Parsing Technologies*, CMU.

https://doi.org/10.1017/S1351324902003066 Published online by Cambridge University Press

Church, Kenneth W., Gale, William A., Hanks, Patrick and Hindle, Donald (1991) Using statistics in lexical analysis. *Lexical Acquisition: Exploiting Online Resources to Build a Lexicon*, pp. 115–164. Hillsdale, NJ: Lawrence Erlbaum.

Church, Kenneth W., Gale, William A., Hanks, Patrick, Hindle, Donald and Moon, Rosamund (1994) Lexical substitutability. In: Atkins B. T. S. and Zampolli A., editors, *Computational Approaches to the Lexicon*, pp. 153–177. Oxford University Press.

Tzoukermann, Evelyne, Radev, Dragomir R. and Gale, William A. (1995) Combining linguistic knowledge and statistical learning in French part-of-speech tagging. *EACL Workshop on Very Large Corpora*. Dublin, Ireland.

Sproat, Richard, Shih, Chilin, Gale, William A. and Chang, N. (1996) A stochastic finite-state word-segmentation algorithm for Chinese. *Computational Linguistics* **22**(3): 377–404.

Kernighan, M. D., Church, Kenneth W. and Gale, William A. (1990) A spelling correction program based on a noisy channel model. *Proceedings Thirteenth International Conference on Computational Linguistics*, pp. 205–210.

https://doi.org/10.1017/S1351324902003066 Published online by Cambridge University Press