RAOUL N. SMITH, Ph.D.

Professor Raoul N. Smith
College of Computer and Information Science
Northeastern University
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EDUCATION

Ph.D. in Linguistics, Brown University, 1968
    Dissertation: "A Statistical Study of Russian Vocabulary, 1968."
    Advisor: Henry Kučera
A.M. in Slavic Languages, Brown University, 1964
    Thesis topic: "A Stylo-Statistical Analysis of Some Russian Prose Works."
    Advisor: Henry Kučera
A.B. in Russian, Minor in Physics, Brown University, 1963
    College Scholar Thesis: "Machine Translation"

Other:

Northeastern University:

COM5970 Oracle Database Administration, (8 QH course), 2002
LAW2501 Patent Law, (4QH), 2001
LAW2369 Intellectual Property, (4QH), 2000
Certificate, Smaller Business Executive Program, Center for Management Development, Northeastern University College of Business Administration, (part-time executive program) 1986

Microsoft Corp: #750 Implementing a Database Design on Microsoft SQL Server 6.5 (1 week course)

Indiana University: Linguistics Institute, Summer 1964

University of Dayton: part-time evening division, 1958-1961. (Physics, mathematics, and philosophy)

Syracuse University: United States Air Force Institute of Technology Russian Language Program, 1957-58, (six months intensive immersive Russian) Valedictorian.

EXPERIENCE

RAOUL N. SMITH AND ASSOCIATES,   1987-Present
Principal
    Consulting on a variety of areas involving computer systems including software forensics, software patent validity, infringement, and interference, human-computer interface design, and database systems.

CHINA EDUCATION CORPORATION, RECRUITMENT DIVISION, Boston, MA
Vice President   2000-2001
    The mission of this company was to recruit and place highly qualified computer professionals from China into jobs in North America.
    My responsibilities were to evaluate and edit applicants' resumes, interview the applicants in China (two months in Beijing and Shanghai), evaluate their credentials and their potential as prospective employees, and recommend them for specific positions.

NORTHEASTERN UNIVERSITY COLLEGE OF COMPUTER AND INFORMATION SCIENCE,
Boston, MA

Professor Emeritus of Computer Science   July 2000- Present
Professor of Computer Science   September 1983 – June 2000

    Member, Resource Committee, College of Computer and Information Science, 2002-Present
    Member, Northeastern University Center for the Advancement of Science Education
        Member, Advisory Committee, 1999-2000
    Member, Academic/Co-op Integration Handbook Project, 1998
    Member, Task Force on Alcohol and Other Drug Policy, 1997-98
    Member, Spiritual Life Advisory Board, 1997-2003
        Member, Program Committee
        Member, Cardinal Cushing Scholarship Committee
    Chair, Merit Review Committee, 1998-99
    Chair, Committee of Full Professors, 1997-98
    Member, University Faculty Senate, 1989-91.
    Chair, Sabbatical Leave Committee, 1986-87
    Member, University Council on Research and Scholarship 1984-86.
        Chair, Committee on Research Strategies for the Next Decade, 1985-86.
    Member, Search Committee for Provost and Senior Vice-President of Academic Affairs 1984-85.
    Chair, College Graduate Program Committee 1983-85.
    Chair, College Hiring Committee 1983-85.
    Member, University Graduate Council (New Programs Committee and Committee on Degree
        Designations) 1983-85.
    Member, Selection Committee for Dean of Computer Science 1983-84.
    Faculty Advisor, NU Student Chapter of Association for Computing Machinery, 1983-84

    Research Areas:
        Artificial Intelligence,   Web-based databases
        Representation of Emotions,   Multi-modal interfaces
        Natural Language Processing,   Intelligent Interfaces
    Courses taught:
        Artificial Intelligence,   Database Management Systems,
        Knowledge Representation and Inferencing,   File Structures,
        Natural Language Processing,   Transaction Processing
        Expert Systems,   Software Engineering,
        Human-Computer Interface Design,   Functional Programming.
        Automata and Formal Languages

Director of Research   May 1985-February 1986
    Wrote proposal and received large equipment grant ($100K) from Digital Equipment Corporation
        (VAX 11/750 and IVIS interactive video system).

Director of the Graduate School   January 1984-May 1985
    Responsible for establishing the Graduate School for the College of Computer Science.
        • Designed the proposal for the M.S. in Computer Science and successfully guided it
        through external review and multi-stage internal review.
        • Established administrative offices and procedures of the Graduate School.

    Formulated, with representatives of the College of Engineering, an M.S. in Computer Systems
        Engineering program.

COGNITIVE COMPUTERS CORPORATION, Newton, MA
Chairman of the Board of Directors   1985-87

Guided the company (dedicated to development of expert systems in chemical analysis) in setting goals, in developing research and marketing strategies, and in hiring.

GTE LABORATORIES, INC., Waltham, MA   January, 1981 - August, 1983
Principal Member of the Technical Staff, Computer Science Laboratory, Department of Knowledge-
Based Systems   January 1983-August 1983

• Developed natural language text generator for intelligent multipurpose communication expert system, based on FRED, a front-end for databases, written in INTERLISP for the Xerox Dolphin LISP machine. Conceived of the concept of collocational grammar as a model for the system. This model, based on human factors studies of queries to databases, was extended to other task and domain independent applications in response generation and in parsing.

• Consultant on the interface to the GTE Telenet/American Medical Association Medical Information Network.

Senior Member of the Technical Staff, GTE Telenet Technology Center,
(On sabbatical from Northwestern Univ, 1981)   January 1981- January 1983.

• Specified the architecture for an intelligent writing assistant and conducted studies of English text structure (syntactic, semantic, and pragmatic) and cohesion (pronominal and conjunctive) for generating text in sublanguages and responding cooperatively to database queries based on the AMA CMIT database.

• Researched knowledge acquisition techniques for deriving knowledge from textual databases.

• Compiled human factors parameters in human-computer communication. Clarified the linguistic form of covert language shaping during user interaction with system. Consulted on the lexical structure of the command language for the GTE Telenet-AMA Medical Information Network.

NORTHWESTERN UNIVERSITY, Evanston, Illinois   September, 1967-December 1981

Tenured Associate Professor of Linguistics
                                                        September 1973-December 1981

Chair, Graduate Program, 1972-1980.
Chair, Graduate Curriculum Committee.
Member, University Computing Center Committee, 1973-79.
Member, College of Arts and Sciences Committee on Program in Computer Studies, 1973-80.
Founding Member, College of Arts and Sciences Committee on Computer Literacy, 1980.
Member, College of Arts and Sciences Committee on Writing Requirement, 1975-80.
Founder and Head of Interest Group in Theoretical and Applied Lexicography, 1973-80.
Chair, Mars Lecture Committee, 1979-80
University Lecture Committee, 1980-81
Faculty Associate, McCulloch Hall, 1974-81

Research and Teaching: Computational and Mathematical Linguistics, Syntax Semantics, Pragmatics, Language of Advertising, Slavic Linguistics (Structure of Russian, Structure of Czech, History of the Russian Language, Old Church Slavonic), History of Linguistics.

Thesis committees: 18 Doctoral committees--9 in Linguistics, 5 in Computer Science, and one each in Biomedical Engineering, French, Anthropology, and Learning Disabilities

PhD Thesis Advisor:
  William Frawley. The Structure of Academic Knowledge:Theory and Application, 1979
  Susan A. Hill. The Teaching of Meaning in a Second Language Context: A Grammar of Second Language Grammars, 1979
  Jadwiga Starzec Brady. Topics in Polish Phonology, 1975
  Edward Robert Maxwell, Jr. Semantic Structures, 1972

Assistant Professor of Linguistics and of Slavic Languages and Literatures (joint appointment)
September 1968-September 1973

  Member of the Faculty of the Graduate School.
  CAS Committee on Appeals and Advanced Standing, 1969-72.
  CAS Committee on Academic Standing, 1973-76.

Instructor of Linguistics   September, 1967-September 1968

UNITED STATES AIR FORCE   February 1957-February 1961
  Electronic data processing specialist, intelligence analyst, and Russian language specialist.
    Stationed at
        • USAFIT Russian Language School, Syracuse University
        • National Security Agency, Fort George G. Meade, Maryland
        • USAF Foreign Technologies Division of Aerospace Systems Command,
        Wright-Patterson AFB, Ohio
    Top Secret Crypto clearance.

OTHER APPOINTMENTS

Co-administrator, International Conference on Systems Dynamics, Shanghai, People's Republic of China, 1987
Visiting Professor, Department of Information Engineering, Jilin University of Technology, Changchun, People's Republic of China, Summer (four months), 1985.
Visiting Professor, University of Maine at Orono, Summer 1978.
Instructor, TEFL methodology and English Linguistics, Peace Corps Training Project Tunisia, Brown University, Summers 1964-66.
Resident Fellow, Stites House, Brown University, 1965-67
Teaching Assistant in Introductory Linguistics and in Computational Linguistics, Brown University, 1964-67.
Research assistant on the Brown English Corpus, 1965-66

Programming Languages Taught: SQL, LISP, IBM Assembler, PL/I, Fortran, SNOBOL, QUEL, HyperTalk, FDL, OPS5, VP-Expert, CLIPS.

Application Systems Taught: Oracle, Sybase, SQL Server NT, Access, Paradox, rbase, Foxpro, MS Office (Word, Excel, Powerpoint).

Operating Systems Used: UNIX, Windows NT Server, JCL, Compass, System 7, MS DOS.

Computer Systems used: IBM 7020, 360, 370, 3033, 4381, CDC 3400, 6400, VAX 750, 785, 8650, Pyramid 98x, IBM PC, SUN, Apple Macintosh

Natural Languages: Read and speak French and Russian well; Read German and Czech somewhat; have studied Chinese, Spanish, Arabic, Latin, and Old Church Slavonic.

GRANTS AND AWARDS

Association for Computing Machinery Grant for Workshop on Mixed Modes of Interaction, 1986.
Digital Equipment Corporation Equipment Grant ($100,000), 1985.
Nominee, Northwestern University College of Arts and Sciences Teaching Award, 1980.
National Endowment for the Humanities Research Grant RO-21309-75-209, ($38,499) 1975-76.
Northwestern University Research Committee Grants, 1976 and 1977-78.
National Endowment for the Humanities Research Grant RO-254-14-76-695, ($28,042) 1976-77.
American Council of Learned Societies Grant, ($1995) 1974-75.
American Philosophical Society Grant, Penrose Fund, ($1215) 1974-75.
National Science Foundation Travel Grant to International Conference on Computational Linguistics,
    Debrecen, Hungary 1971.
Northwestern University nominee for National Endowment for the Humanities Younger Humanist
    Fellowship, 1971
Northwestern University Research Coordination grant, 1968-69
Summer faculty grant-in-aid, Northwestern University, 1968
National Science Foundation Doctoral Dissertation Research Grant, 1966-67.
National Science Foundation Fellowship for Mathematical Linguistics Seminar, Linguistics Institute,
    UCLA, 1966.
B.A. Ballou Corporation Scholar, Brown Univ., 1962-63.
College Scholar, Brown Univ., 1962-63
Valedictorian, Russian Language Program, USAFIT, Syracuse University, 1958

MEMBERSHIP IN AND ADMINISTRATION OF PROFESSIONAL SOCIETIES

International Society for Applied Intelligence
    Member, Review Board
American Association for Artificial Intelligence
Association for Computational Linguistics
    Representative to American Federation of Information Processing Societies (AFIPS) Education
    Committee, 1986-87
Association for Computing Machinery (ACM), 1969-2000
    Member, Strategic Planning Committee, l987-1989
    Session Chair "Human Factors in Information Filing and Retrieval," Annual Meeting of ACM., Dallas,
    1982
    Session Chair, Workshop on Intelligent Interfaces, Asilomar Conference Center, Montery CA, 1988
    Special Interest Group on Computer-Human Interaction (SIGCHI) (Co-founder)
        Co-Chair, 1981-85
        Chair, CHI83 Conference on Human Factors in Computing Systems, the society's first national
            conference, Boston, December, 1983
        Member of Program Committee, Panels Chair, and Senior Advisor, CHI85 Conference, San
            Francisco
        Co-Chair, CHI86 Conference, Boston
        Organizer and Chair, Workshop on Multi-media and Multi-modal Interfaces, Key West, 1986
        Senior Advisor to CHI 87 Conference, Toronto
        Chair, Nominating Committee, 1986-87
        Member of Advisory Board, 1985-1987
        Member, Conference Planning Committee, 1983-88
        Chair, Audit Committee, 1988-89
    Special Interest Group on Artificial Intelligence (SIGART)
    Special Interest Group on Language Analysis and Studies in the Humanities
IEEE Computer Society
American Dialect Society
Linguistic Society of America, 1968-
Linguistic Circle of New York
International Linguistics Association

Dictionary Society of North America, 1986-
    Member, Committee on Lexicographic Terminology
Modern Language Association
    Discussion Group on Lexicography
        Chair, 1984-85
        Member, Executive Committee, 1980-85
Sigma Xi

CONSULTANT

Stenographic Machines, Inc., Skokie, IL
    (Computer translation of machine stenographic notes)
American Psychoanalytic Association
    (Index construction for *Journal of American Psychoanalytic Association* and semantic networks)
Pattishall, McAuliffe, & Hofstetter, Attorneys-at-Law, Chicago, IL
    (Miller Brewing Company v. Schlitz Brewing Co., Linguistic analysis of the word 'lite/light' in
    the context of foods and beverages, 1977;
    Love's Interprises, Inc. v. Wuv's International, Inc. Cancellation No. 11,352, 1978;
    Miles Laboratories, Inc.v. American Medical Systems, Inc., Opposition No. 60,228, 1980;
    deposed)
Jenner and Block, Attorneys-at-Law, Chicago, IL
    (Science Products Company, Inc. v. Chevron Chemical Co., Inc., 1978)
Charne, Glassner, Tehan, Clancy, & Taitelman, Attorneys-at-Law, Milwaukee, WI
    (Henri's Food Products, Inc. v. Kraft, Inc., 1983; wrote 79 page lexicographic/semantic analysis of
    the word 'whip' in the context of food products; testified at trial)
Prism Associates, Baltimore, MD
    (Natural language interfaces to databases)
Safeguard Business Systems, Philadelphia, PA
    (Natural language interfaces to databases)
The Associated Corporation, Newport, RI
    (Natural language semantics in defense information systems)
Delphic Associates, Inc., Washington, DC
    (Soviet artificial intelligence)
The China Source, Boston, MA
    (Graduate programs in Information Engineering in China)
Ministry of Machine Building, People's Republic of China
    (College programs in computer science)
Leydig, Voit, & Mayer, Attorneys-at-Law
    (Trademark infringement)
Digital Equipment Corporation, Hudson, MA
    (Knowledge representation seminar tutor 1988 and 89; Futures Workshop member, 1989)
CompuMedical, Inc., Natick, MA
    (New commands in the MUMPS programming language)
Houghton-Mifflin Publishers
    (On-line grammar checker, 1992)
Oblon, Spivack, McClelland, Maier & Neustadt, Attorneys-at-Law, Arlington, VA
    (Davidson et al. v Cannon v Goodman v Buckley et al., Interference No. 102,872, 1993;
    testified by expert report)
Fredrikson & Byron, P.A., Minneapolis, MN
    (Radisson Hotels International v Westin Hotels et al.:
    Software patent validity and patent infringement; testified by expert report)
Oblon, Spivack, McClelland, Maier & Neustadt, Attorneys-at-Law, Arlington VA
    (Catalina Marketing International, Inc. v Incentech, Inc., formerly Credit Verification Corporation,
    patent infringement; testified by expert report and deposed, 1999)

Mintz, Levin, Cohn, Ferris, Glovsky, and Popeo PC, Reston, VA
    (Inline Software Corporation v. Tendril Software, Inc.
    copyright infringement, 2000)

PUBLICATIONS

BOOKS, AUTHOR:

Dictionary of Artificial Intelligence, New York: Facts on File Publishers,Inc., 1989.
    Revised and reprinted by Collins Publishers, Inc. Glasgow, U.K., 1990.
    Reviewed in *American Reference Books Annual* Vol. 21, 1990; *Choice* September, 1989; *Computing Reviews* November, 1989; *Intelligence Artificielle au Canada* April, 1990; *Library Journal* April 15, 1989; *Reference Books Bulletin* September 1, 1989; *Reference and Research Books News* August, 1989; *Science Activities* Feb/Mar, 1989; *Science Books and Films* Sep/Oct, 1989; *Science News* June 10, 1989; *Signal* June, 1989; *Surrey Book Reviews* May, 1989;*Wilson Library Bulletin* March, 1989.

The Language of Jonathan Fisher (1768-1847). Publications of the American Dialect Society, No. 72.
    University of Alabama Press, 1985.
    Reviewed in *SECOL Review* 11.1(1987):88-90. The reviewer stated that "anyone considering undertaking the reconstruction of an American idiolect or dialect …would do well to take Smith's study as a model."

Evens, M.B., B.E. Litowitz, J.A. Markowitz, R.N. Smith, O. Werner. *Lexical-Semantic Relations: A Comparative Survey.* Champaign and Alberta: Linguistic Research, Inc. 1980.
    Reprinted 1983.
    Reviewed in *Computing Reviews*, 22.9(1981):387; *Language*, 58.1(1982):242; *American Anthropologist* , 84(1982):181-3; *The International Journal of Psycholinguistics*, 8.1.

Probabilistic Performance Models of Language. Janua Linguarum, series minor, 150. The Hague: Mouton and Company, 1973.

BOOKS AND JOURNALS, EDITOR:

Frawley, W. and R. N. Smith, eds. special edition, *Lexicography*, Vol. 1, No. 3 (Autumn,1988).

Technical editor of Jakobson, G. *Artificial Intelligence in the Soviet Union.* Washington, DC: Delphic Associates, 1985.

Co-editor (with Lu GuoQang), English-Chinese Dictionary of Collocations and Associations, Fudan University, Shanghai, PRC

Member, Review Board, *Applied Intelligence*, The International Journal of Artificial Intelligence, Neural Networks, and Complex Problem-Solving Technologies, 1999-Present

ARTICLES:

Frawley, William, John T. Murray, and Raoul N. Smith, "Semantics and Narrative in Therapeutic Discourse," in Herman, David, ed., *Narrative Theory and the Cognitive Sciences*, Palo Alto, CA: CSLI Publications, Stanford University, (in press).

Frawley, William J. and Raoul N. Smith, "A Processing Theory of Alexithymia," *Journal of Cognitive Systems Research.* 2(2001):189-206.

Frawley, William and Raoul N. Smith, "Alexithymia and the Biocybernetics of Shame," in Kaszniak, Alfred *Emotions, Qualia, and Consciousness*, Proceedings of the International School of Biocybernetics, Naples, Italy, October 1998.River Edge, NJ: World Scientific Publishing, Inc., 2001 pp. 494-594.

Smith, Raoul N. and William J. Frawley, "Affective Computing: Medical Applications," In H-J. Bullinger and J. Ziegler, eds., *Human-computer interaction: Ergonomics and user interface: Proceedings of HCI International 1999 (The 8th International Conference on Human-Computer Interaction, Munich, Germany) Vol. I*. Mahwah, NJ: Laurence Erlbaum Associates, Publishers, 2000(843-847).

Smith, Raoul N. and William J. Frawley, "Alex: A Computer Aid for Treating Alexithymia," in Imam, Ibrahim et al. *Lecture Notes in Artificial Intelligence: Multiple Approaches to Intelligent Systems (Twelfth International Conference on Industrial and Engineering Applications of Artificial Intelligence and Expert Systems, Cairo, Egypt),*. Berlin: Springer Verlag 1999(362-371).

Smith, Raoul, Chuan Chung Chen, Fang Fang Feng, and Hector Gomez-Gauchia, "A Massively Parallel Memory-based Story System for Psychotherapy," *Computers and Biomedical Research*, vol 26, pp. 415-423, 1993.

_____"Dr. Bob: A Massively Parallel Memory-based Expert System for Psychotherapy and Recovery," *Expersys-92*, ed. by Attia, F., Flory, A. et al., IITT International, 1992, pp. 343-348.

Decker, David and R. N. Smith, "The Acquisition of Lexical Pragmatics," *Proceedings of the First International Language Acquisition Workshop,* International Joint Conference on Artificial Intelligence (IJCAI), Detroit. Menlo Park: American Association of Artificial Intelligence,1989, pp. 13-22.

Frawley, W. and R. N. Smith, "Problems of Lexicographic Form," *Lexicography*, Vol. 1, No. 3 (1988):161-64.

"Applied Expert Systems," *Cutting Edge Technologies and Microcomputer Applications for Developing Countries.* National Academy of Sciences, 1988, pp. 99-107.

"Lexical Collocation in Information Engineering," *Studies in Information Science,* Jilin University Press, People's Republic of China (in Chinese).

Frawley, W. and R. Smith, "Patterns of Textual Coherence in Genre-Specific Discourse," *Humans and Machines: The Interface through Language* ed. by S. Williams, Norwood, NJ: Ablex, 1985 (145-53).

"Conceptual Primitives in the English Lexicon," *Lexicography Today* Edmonton, Alberta: Linguistic Research, Inc. 1985 (99-137).

"The Speech of Jonathan Fisher (1768-1847) of Blue Hill, Maine," *Annual Proceedings of the Dublin Seminar for New England Folklife*, ed. by P. Benes, Boston University Press, 1985, pp. 70-76.

"On Personal Translators," *Translation: Literary, Linguistic, and Philosophical Perspectives,* ed. by W. Frawley, Cranbury, NJ: Associated University Presses, Inc., 1984 (150-8).

Smith, R. and W. Frawley, "Conjunctive Cohesion in Four English Genres," *Text* 3-4(1983):347-73.

"An Early American Unpublished Hebrew-English Lexicon," *Jewish Language Review*, 3(1983):19-28.

Ford, W. and R. Smith, "Collocational Grammar as a Model for Human-Computer Interaction," *Proceedings of the Ninth International Congress of Computational Linguistics,* Prague, Czechoslovakia, 1982, Vol. II, pp. 106-10.

Smith, R., D. Bienstock, and E. Housman, "A Collocational Model of Information Transfer," *Information Interaction: Proceedings of the Annual Meeting of the American Society of Information Science* Vol. 19, 1982, pp. 281-84.

"Computerized Aids to Writing," *Linguistics and Literacy*, ed. by W. Frawley, Plenum Press, 1982, pp. 189-208.

"A Functional View of the Linguistics of Advertising," *Linguistics and the Professions,* Vol. 8 of *Advances in Discourse Processes*, ed. by R. DiPietro, Norwood, NJ: Ablex Publishing Co., 1982, pp. 189-99.

"Dialog with a Computer:Issues in Linguistic Ergonomics," *Proceedings of IEEE (The Institute of Electrical and Electronics Engineers) National Telecommunications Conference,* 1981, pp. C6.2.1-5.

"On Defining Adjectives: Part III," *Dictionaries*, 3(1980-81):28-38.

Smith, R. and M. Smith, "Prolegomena to a Linguistic Theory of Marketing Communication," *Centerpoint* 4.2(1980):58-75.

"The Interest in Language and Languages in Colonial and Federal America," *Proceedings of the American Philosophical Society* 123.1(1979):29-46.

Evens, M. and R. Smith, "A Lexicon for a Computer Question-Answering System," *American Journal of Computational Linguistics*, Microfiches 81 pp. 16-24 and 83 pp. 1-98, 1978.

"Computational Bilingual Lexicography: A la recherche du mot juste," *Computer Support to Translation: Proceedings of the FBIS Seminar*, Washington, DC: NTIS, pp. 84-112.

"A Description of the Penobscot and Passamaquoddy Indians in 1808," *Man in the Northeast* 14(1978):52-56.

Smith, R. and M. Evens, "Generating a Conceptual Network from an Index," *Information Management in the 1980's: Proceedings of the ASIS (American Society for Information Sciences) Annual Meeting*, Vol 14, 1977, Microfiche 8, 12 pp. White Plains, NY: Knowledge Industry Publications, Inc.

Smith, R. and E. Maxwell, "An English Dicitionary for Computerized Syntactic and Semantic Processing Systems," *Computational and Mathematical Linguistics*, ed. by A. Zampolli and N. Calzolari, Florence: Olschki, 1977, pp. 303-22.

"A Bibliography of Books on Language and Languages Printed in the United States through the Year 1800," *Historiographia Linguistica* 4.2(1977):207-43.

"An Early Nineteenth Century Penobscot Wordlist," *International Journal of American Linguistics* 43(1977):101-4.

Smith, R. and G. Pappin, "The Coded Manuscripts of Johathan Fisher (1768-1847): Some Techniques in Generating and Editing Parallel Texts, *SIGLASH (Special Interest Group on Language Analysis and Studies in the Humanities of the Association of Computing Machinery) Newsletter*, 9.4(1976):10-21.

"The Sociology of Language in Johann David Michaelis' Dissertation of 1760," *Journal of the History of the Behavioral Sciences*, 12(1976):338-46.

"A Probabilistic Model for Performance," *Papers in Computational Linguistics*, ed. by F. Papp and G. Szepe, Hungarian Academy of Sciences and The Hague: Mouton & Co., Janua Linguarum, Series Major 91, pp. 411-18.

"Interactive Lexicon Construction," *Papers in Computational Linguistics* Hungarian Academy of Sciences and Mouton & Co., Janua Linguarum Series Major 91, pp. 161-72.

"The Philosophical Alphabet of Jonathan Fisher (1768-1847)," *American Speech* 50(1975):36-49.

Kantor, M. and R. Smith, "A Sketch of the Major Developments in Russian Historical Phonology," *Folia Linguistica* 7.3/4(1975):389-400.

Maxwell, E. and R. Smith, "A Computerized Lexicon of English," *Computers in the Humanities,* ed. by J. C. Mitchell, Edinburgh: Edinburgh University Press, 1974, pp. 124-31.

"The Stylistic Use of Syntactic Features in Some Russian Novels," *Language and Style* 6.2(1973): 127-34.

"Toward a Representation Scheme for Performance," *Linguistics*, 108(1973) 78-90.

"Automatic Steno Translation," *Proceedings of the Annual Meeting of the Association for Computing Machinery,* 1973, pp. 92-96.

"Interactive Lexicon Updating," *Computers and the Humanities,* 6.3 1972): 137-45.

"A Computer Simulation of Phonological Change," *ITL Review for Applied Linguistics*, 5(1971): 82-91.

"Automatic Simulation of Historical Change," *Preprints of Papers for the International Conference on Computational Linguistics*, Stockholm, 1969, 14 pp.

REVIEWS

Hartman, Steven Lee, "A Universal Alphabet for Experiments in Comparative Phonology," *Computing Reviews*, 23.7(1982):370.

Hockey, Susan, *A Guide to Computer Applications in the Huimanitie. Computes in the Humanities.*

Mann, W. and J.A. Moore, "Computer Generation of Multiparagraph English Text," *Computing Reviews*, 22.11(1981):502

Kjetsaa, Geir, "'And Quietly Flows the Don' through the Computer," *Computing Reviews*, 21.4(1980):158-9.
Morin, Yves-Charles et al. *Le Français de la région de Montréal: Aspects phonétique et phonologique. International Journal of American Linguistics* 43.3(1977):232-3

Thompson, Henry, "Towards a Model of Language Production: Linguistic and Computational Foundations," *Computing Reviews,* 18.9(1977):333-34.

The American Heritage Word Frequency Book and *The American Heritage School Dictionary. Computers and the Humanities*, 18.5-6(1974):335-36.

Schuegraf, E.J. and H. S. Heaps," Selection of Equifrequent Word Fragments for Information Retrieval,: *Computing Reviews*, 18.9 (1974): 315.

Damerau, F.J., *Markov Models and Linguistic Theory, Computers and the Humanities,*8.9(1974):264-65.

Wilks, Y., "The Stanford Machine Translation Project," *Computing Reviews*, 15.2(1974):54.

Kaplan, R.M. "A General Syntactic Processor," *Computing Reviews* 14.12(1973): 588-89.

Kučera, H. and W.N. Francis, *Computational Analysis of Present-Day American English. Brown Alumni Monthly*, February, 1968, p. 20

PRESENTATIONS[1]

"A Stylostatistical Comparison of Gogol and Turgenev," New England Linguistic Conference, University of Massachusetts, Amherst, Mass., September, 1966

"Early Linguistic Work of Jonathan Fisher," Annual Meeting of the Jonathan Fisher Memorial, Inc., Blue Hill, Maine, August, 1974

"Computational Techniques in the Analysis of the Manuscripts of Jonathan Fisher Written in Phonetic and Stenographic Code," Second International Conference on Computers in the Humanities, Los Angeles, April, read by title, 1975

"Jonathan Fisher, Early American Linguist," Special Bicentennial Session of the Annual Meeting of the International Linguistics Association, New York, March, 1976

"The Function of Certain Indirect Speech Acts in Chekhov's *Three Sisters," Meeting of the American Association for the Advancement of Slavic Studies, Midwest Slavic Conference,* Chicago, May,1976

"Psychological Reality in the Symbols of a Late Eighteenth Century Stenographic Code," First Annual Symposium on Symbols and Symbol Processes, Las Vegas, August, 1976

"Lexical Semantic Relations: A Critical Survey," Conference on Lexicography, Louisville, Kentucky, March (with M. Evens, B. Litowitz, and 0. Werner), 1977

"A Lexicon for a Computer Question-Answering System," Annual Meeting of the Association for Computational Linguistics, Washington, D.C., March. (With M. Evens) 1977

"A Linguistic Theory of Marketing Communications," Graduate School of Management, Northwestern University, April. 1977

"Linguistics and Writing," Symposium on Written Language sponsored by the Program in Learning Disabilities, School of Speech, Northwestern University, July, 1977. 1977

"The Interest in Language and Languages in Colonial and Federal America: Bibliographical Analysis in Linguistic Historiography," Third Annual Conference on Historical Linguistics, Hamburg, West Germany, August. 1977

"Generating a Conceptual Network from an Index," Fortieth Annual Conference of the American Society for Information Science Special Interest Group in Arts and Humanities. September, 1977

"A Production Model of Text: The Generation of Advertising Copy," Session on Computers and the Study of Language, Modern Language Association annual meeting, Chicago, December. 1977

"The Language of Advertising," guest speaker, Executive Master's Program, Graduate School of Management, Northwestern University, April. 1978

"A Functional View of the Linguistics of Advertising," Delaware Symposium on Language Studies: Language in the Professions, University of Delaware, October, 1980

"The Conceptual Structure of the English Lexicon," Lexicography Session, Modern Language Association, Houston, December, 1980.

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[1] Other than those published above

"Collocation and collocational relations: Which ones are captured in W7 and how they can be used in parsing and text generation," NSF Workshop on Machine-Readable Dictionaries, Stanford University, 11-13 April , 1983

"Semantic Primitives for Commonsense Reasoning," National Television University, High-Tech Forum, January, 1988, June 1989

"Computer Aids for Treating Alexithymia," Emotions Week, Geneva, Switzerland, 1995

"Emotions in Human-Computer Interaction," Basic Research Symposium, CHI 96, Vancouver, BC

"Emotions in Virtual Reality," Workshop on Virtual Reality, CHI 96, Vancouver, BC

INVITED LECTURES

Boston Computer Society Medical and Dental SIG, January, 1985

Shenyang Institute of Automation, Academy of Sciences, People's Republic of China, August, 1985

Fudan and Jiao Tung Universities, Shanghai, People's Republic of China, August, 1985

Seoul National University, Seoul, Korea, September, 1985

Korean Institute for Advanced Studies in Science and Technology, Seoul, Korea, September, 1985

Japanese Association of College Teachers, Tokyo, Japan, September, 1985

Boston Chapter of ACM SIGSHI Inaugural Lecture, November, 1985

National Academy of Sciences Symposium on Applied Expert Systems, session keynote, Lisbon, Portugal, September, 1986

"Natural Language Interfaces," Greater Boston Chapter of ACM, February, 1987

"Computer Aids for Alexithymia and Addiction," Columbia Medical School Department of Medical Informatics, October, 1996

"Computers and Emotions," Colloquium Series, Cognitive Science Program, University of Delaware, April, 1997

"Computer Literacy in General Education: Notes form the Field," University of Delaware, 1999.

TUTORIALS

"Natural Language Interfaces," CHI86 Tutorial, Association for Computing Machinery, 1986.

"Knowledge Representation and Reasoning," Artificial Intelligence Center, Digital Equipment Corporation, April 1988, May 1989 (One-week seminars)

"Intelligent Interfaces," Tutorial, Artificial Intelligence in Government Systems Conference, GWU, Washington, DC, March 1989

TECHNICAL REPORTS

"Russian Corpus R1," Department of Linguistics, Brown University, 1965.

"Some Clues to Word Boundary Identification," Stenographic Machines, Inc. 1973.

"Issues Regarding Idiosyncratic Rules and their Relation to the Dictionary," Stenographic Machines, Inc. 1973.

"Aspects of the form, function, and implementation of the grammar," Stenographic Machines, Inc. 1973.

"First Draft of the Grammar," Stenographic Machines, Inc. 1973.

"Modified Test Version of Grammar S1," Stenographic Machines, Inc. 1973.

"Mini Test Dictionary," Stenographic Machines, Inc. 1973.

"The A/AN Rule," Stenographic Machines, Inc. 1973.

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"On Using Probabilities of Lexical Collocation in Disambiguating Steno Strokings," Stenographic Machines, Inc. 1973.

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"The Function and Form of Written Communication," GTE Labs TR 81-401.2, 1981. (Paper presented at Symposium on Written Language, Northwestern University, 1980).

Linguistic Human Factors Issues in the Development of FRED—An Intelligent Front-End for Databases, GTE Labs TN 81-404.8, April, 1981.

"Automatic Text Generation: A Survey," GTE Labs TN 82-408.1.

"A Generalized Architecture for Text Generation," GTE Labs TN 82-408.2.

A Selected Bibliography of Recent Work on Collocation and Lexicography, GTE Labs June, 1982.

LEXPERT: Knowledge Acquisition from Medical Texts," College of Computer Science, NU, 1989 (with David Decker).

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International Directory of Education
Who's Who in Technology Today
Men of Achievement
Who's Who in Science and Engineering, 2000-
Who's Who in Finance and Industry, 31st ed., 2000-
Who's Who in America, 53rd ed., 1999-
Who's Who in the East, 27th ed. 1999-
Who's Who in the World, 15th ed., 1998-
Who's Who in American Education, 6th ed., 2003-
American Men and Women of Science, 20th ed.