

# **COLING 94**

**The 15th International Conference on Computational Linguistics**

## **PROCEEDINGS**

**Vol. II**

August 5 – 9, 1994

Kyoto, Japan



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## **PREFACE**

COLING is held every other year under the auspices of ICCL.

This conference is to discuss theoretical and practical problems occurring when languages are handled by computer. The discussion covers a wide range of linguistic issues and their computer implementation. These include: (a) linguistic theories such as syntax, semantics, and discourse problems; (b) linguistic data such as dictionaries and text corpora; (c) algorithms for analysis and synthesis; (d) experimental systems for language understanding and dialogue; and (e) application systems such as those involving machine translation and man-machine interface. This conference provides the bases and technologies essential for the future information society.

The 1st International Conference was held in New York in 1965, and the 8th Conference was in Tokyo in 1980. The 15th Conference in Kyoto will be a good opportunity to learn what role languages will play in the information- and multimedia-oriented society. We expect this Conference to promote greater development in this field.

Professor Makoto Nagao  
Conference Chairman

## Program Chairman's Introduction

My first duty and pleasure is to thank all those involved in preparing the program for COLING94, as well as those who are to present papers and participate in panels. A very long list appears in this volume of those who were on the program committee or assisted its members directly by reviewing. The committee itself operated as a set of more or less autonomous members, differing in area of expertise, and making final recommendations to me based on the forms filled by the reviewers themselves. In only one case, I think, did I interfere in that recommendation: all other exercises of discretion by me were where the committee member remained uncertain and, more generally, where the final recommendations, as a whole, exceeded the slots available, given their type (long or short). We did change the names of the types between the first announcement and the final outcome, after it became clear how hard it would be to provide platforms for demonstrations in Kyoto with the resources available.

The acceptance/rejection ratio was almost exactly the same as in 1992, namely same as the last COLING, namely 1:2. This would be insufficiently macho for more abrasive conferences, but I feel sure the quality of this conference is good and will compare favorably with its predecessors. It is hard to gauge the changes in area of interest in the last two years since we have used a different taxonomy (without separating off Applications) from what was used at Nantes, but I suspect that the proportions are very similar, perhaps with syntax having a small resurgence, and empirical methods (broadly defined and not excluding syntax) still running very strong.

A very pleasing feature is the wide spread of countries represented here (28), which has always been an important matter in at COLINGS. They are, I believe, the most international meetings in our field, much more so than ACL or AACL, which remain fundamentally American meetings, which makes the whole review process much simpler, a matter I shall return to below.

As always, the host country is well represented here, though if you add together the papers from Germany and the UK they total the same as those from Japan, and the summed population of the two countries is also roughly that of Japan. By that standard, Japan is not over represented here at all, and perhaps the US and other parts of Europe, as well as many other countries, are under represented, with respect both to their populations and the amount of relevant work being done in them.

US under-representation abroad is always a result of the no-repeat-papers rule imposed by some US conferences, and we have lost a number of accepted papers in that way this year, which is why we took twenty "reserve" papers into the printed proceedings. However, the US was well-represented on the program committee and the ratio of papers submitted to those accepted was pretty invariant across countries. So, this under-representation remains a pity, especially in view of the important role that US Government research programs, particularly the ARPA Speech and Language Program, have had on the field world-wide in recent years. That Program has done more than any other to reestablish the importance of evaluation to progress and the primacy of empiricism in CL/NLP; even though some of the growth points came from elsewhere, particularly example-based MT from Japan, and statistical corpus tagging from the UK. Hopefully, the International Projects Day, chaired by Antonio Zampolli, will give a platform for what has been done in the US under that program.

It must be said here that aspects of the program construction process have made some people unhappy, including me: especially (i) the fact that the date given for return of verdicts on papers was missed; (ii) that referees' comments on REJECTED papers were not returned to authors immediately, and (iii) there were mailing errors of various sorts.

No author has complained specifically about (iii), but at least one of the errors happened at Sheffield and may have contributed to problem (i). I apologize for all the above, since I am responsible though, as adults know, that is not the same as being to blame. As to (ii), I decided initially that, as this was not done

uniformly, and COLING has little in the way of a formal budget, I would not return the comments on rejected papers, even though I realised and appreciated that much work had gone into them. However, the volume of protests caused me to reconsider and these have now been sent out, but I very much take the view that this was done as a courtesy to colleagues and not because there is some mysterious right to them, and especially not because the Committee has to prove to any individual that its decisions are transparent and not open to question. The last is a very important point, and I will return to it below, but I am certain that the reviewing process world wide cannot continue to function if our community comes to believe that decisions of this kind are justiciable, and can be judged and questioned by legal criteria. That is a deep cultural error, I am certain. The reliability of the process as a whole rests on the collective reputations of the committee as individuals in our research community, and nowhere else.

I have a particular perspective on this because I was also the COLING84 Program Chair. Then as now, there was a slightly amateurish chaos about arrangements, if anything it may have been slightly worse that year because I was on sabbatical leave in Costa Rica at the time, and running things with a worse communication system than was generally available ten years ago. There were glitches as always, but the conference was as great success, as COLINGs normally are, and all was right on the night.

Costa Rica was, in that sense, a symbolic center from which to organize a COLING, in that the ICCL has always taken a more world-wide view of the field than have the professional societies which has meant, since global communications are not evenly distributed, that the most up-to-date methods have not been used: we have stuck to paper and mail, perhaps wrongly, as the basis of reviews, and have had a wide-flung committee, all of whom must report before decisions can be taken. All that inevitably leads to a slower, bumpier review process and we shall perhaps be able to change it in the near future, given the rate at which the Internet is spreading.

However, in that decade, there have been other real changes in this process that I have noticed and would like to comment on, particularly in:

(a) the expectation level from authors and participants and, in particular, the belief of some of them that the client-provider model is an appropriate one for the author-program-official relationship and (b) the way the immediacy and density of email can produce damaging side effects in procedures like conference reviewing.

There have been, in recent times, four main modes of conference organization:

a. The old ICCL way of organizing COLING, where the ICCL itself reviewed abstracts and made quick decisions with no reports to authors. A magnificent version of that was Hans Karlgren's extraordinary performance as program chair of COLING 90 in Helsinki, where he read and commented on virtually every paper himself.

b. The fully funded style US meeting with a professional organization (AAAI) or secretariat (ACL) and a paid committee meeting where all issues MUST be settled to a schedule. This is a high cost method, but deadlines are kept because any late sub-reviewer will have their papers reviewed at the meeting by some part of the Committee. This requires strong geographical proximity in the Committee which COLING does not have, even if it had funds.

c. The conventional low-cost format that we have operated at this conference, with no committee meeting, and mailing paper backwards and forwards across the world. There can be fully electronic forms of that process, of course, but many COLING papers still come from email-poor areas and groups which would penalize exactly the people we have always favored, in some sense.

d. The streamlined conference arrangement that I see more frequently, particularly coming from Japan, and now being used elsewhere: rapid off-the-cuff comments and decisions from committee members by email and with little in the way of formal requirements, all done in full knowledge that a huge favor is being asked of busy reviewers, for no reward whatever, and with an assumption that it probably does not make much difference to the outcome, which is pretty robust across different reviewing procedures.

As claims increase on the time of all of us, we will move, I am sure, towards form (d) which is also, paradoxically, close to the original COLING form (a). The ICCL might want to move towards the "full accountability model" (b) as used by most American professional bodies. It is high-cost, efficient, and can probably only work well in a tight-knit national community. Moreover, in many cases it can become bogged down in issues of political correctness that the international community usually finds less pressing than real political issues, on which COLING has had an excellent record: e.g. defending and supporting CL in Eastern Europe during very difficult periods.

COLING remains the most amateurish of such meetings, without budget or treasurer, and without fixed rules or a membership. It is not, in a strict sense, accountable to anyone and, however much that may be unacceptable to some, it does tend to produce nicer conferences. These reflections, and their relationship to accountability, have been provoked by the changes over the decade I referred to above. While doing this job in 1994, I have received an enormous amount of email, demanding responses on everything from paper receipt to margin sizes to hotel reservations to serious complaints about my "defective consciousness of public duty" as one correspondent put it. He was one of two I know of who chose to go straight to the Internet with these complaints in very strong terms indeed, though without any detailed knowledge of what was happening in the review system and why.

I am sure all this criticism was richly deserved, but the danger I see, beyond the purely personal, is that it will become very hard to recruit colleagues to serve in any of these roles (in journals as well as conferences) for no reward, and certainly outside the fully-supported conference of type (b), if the density and unpleasantness of much of this email were to continue. The very immediacy of the email medium, just banging out a message world-wide or to individuals to relieve one's feelings and without thought or knowledge, encourages this situation.

The source of much of it, and it comes, shall we say, from the more litigious CL zones of the world in general, is a belief that an author's relationship to a program chair or committee member is one of client-to-provider, to one who is accountable, for a fee, and can be sued. Only that belief could explain the vehemence, the stridency, the demandingness for accountability of decisions, that I have recently encountered. Such beliefs are, of course, very much culture specific, and represent a transfer of the attitudes associated with the fully-funded responsible-to-a-membership professional meetings in the US to the quite different situation of COLING.

The ICCL will probably have to ask itself, at some stage, if it wants to follow model (b), though without a membership that would be hard to fund, or perhaps to state a firm position that COLING is not a conference of that sort and that older attitudes, of a sort that used to prevail among academic colleagues, where one was careful what one said because one's roles would be reversed next time, may continue to prevail. None of that would be incompatible with greater efficiency in the organization of the program, and perhaps with a fully automated form at the next COLING if it is thought that the Internet has now penetrated all parts of the known CL universe. Personally, I am sure COLINGs will continue to be a little different from other meetings, to the benefit of all of us and to the field we represent.

Yorick Wilks  
Program Chairman



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## Table of Contents (Vol. I)

### Machine Translation

<i>Improvement in Customizability Using Translation Templates</i> .....	25
S. Kinoshita, A. Kumano, H. Hirakawa (Toshiba Corp.)	
<i>Countability and Number in Japanese to English Machine Translation</i> .....	32
F. Bond, K. Ogura, S. Ikehara (NTT Communication Science Labs.)	
<i>A Method for Distinguishing Exceptional and General Examples in Example-based Transfer Systems</i> .....	39
H. Watanabe (IBM Japan, Ltd.)	
<i>Interpreting Compounds for Machine Translation</i> .....	45
B. Gawronska, A. Nordner, C. Johansson, C. Willners (University of Lund)	
<i>Towards Machine Translation Using Contextual Information</i> .....	51
T. Cornish, K. Fujita, R. Sugimura (Matsushita Electric Industrial Co., Ltd.)	
<i>Two Methods for Learning ALT-J/E Translation Rules from Examples and a Semantic Hierarchy</i> .....	57
H. Almuallim, Y. Akiba, T. Yamazaki, A. Yokoo, S. Kaneda (King Fahd Univ. of Petroleum and Minerals/NTT Communication Sci. Labs)	
<i>A Bidirectional, Transfer-driven Machine Translation System for Spoken Dialogues</i> .....	64
Y. Sobashima, O. Furuse, S. Akamine, J. Kawai, H. Iida (ATR Interpreting Telecommunication Research Laboratories)	
<i>Treating 'Free Word Order' in Machine Translation</i> .....	69
R. Steinberger (UMIST)	
<i>Building an MT Dictionary from Parallel Texts Based on Linguistic and Statistical Information</i> .....	76
A. Kumano, H. Hirakawa (Toshiba Corp.)	
<i>Dilemma - An Instant Lexicographer</i> .....	82
H. Karlgren, J. Karlgren, M. Nordström, P. Pettersson, B. Wahrolén (Swedish Institute of Computer Science)	
<i>Portable Knowledge Sources for Machine Translation</i> .....	85
K. Takeda (IBM Research)	
<i>Coping with Ambiguity in a Large-Scale Machine Translation System</i> .....	90
K. L. Baker, A. M. Franz, P. W. Jordan, T. Mitamura, E. H. Nyberg, 3rd (Carnegie Mellon University)	
<i>Evaluation Metrics for Knowledge-Based Machine Translation</i> .....	95
E. H. Nyberg, 3rd, T. Mitamura, J. G. Carbonell (Carnegie Mellon University)	
<i>A Matching Technique in Example-Based Machine Translation</i> .....	100
L. Cranias, H. Papageorgiou, S. Piperidis (Institute for Language & Speech Processing, Greece)	
<i>Constituent Boundary Parsing for Example-Based Machine Translation</i> .....	105
O. Furuse, H. Iida (ATR Interpreting Telecommunications Research Labs.)	
<i>The JaRAP Experimental System of Japanese-Russian Automatic Translation</i> .....	112
L. S. Modina, Z. M. Shalyapina (Russian Academy of Sciences)	
<i>Perspectives of DBMT For Monolingual Authors on the Basis of LIDIA-1, an Implemented Mock-up</i> .....	115
H. Blanchon (GETA-IMAG)	

<i>Modals as a Problem for MT</i> .....	120
B. Sigurd, B. Gawrónska (Lund University)	
<i>Two Types of Adaptive MT Environments</i> .....	125
S. Nirenburg, R. Frederking, D. Farwell, Y. Wilks (Carnegie Mellon Univ./New Mexico State Univ./Univ. of Sheffield)	
<i>An English-to-Korean Machine Translator:MATES/EK</i> .....	129
K.-S. Choi, S. Lee, H. Kim, D.-B. Kim, C. Kweon, G. Kim (Korea Advanced Institute of Science and Technology)	
<i>Interlanguage Signs and Lexical Transfer Errors</i> .....	134
Atle Ro (University of Bergen)	

### **Morphology & Tagging**

<i>Morphology with a Null-Interface</i> .....	141
H. Trost, J. Matiasek (Austrian Research Institute for Artificial Intelligence)	
<i>Automatic Model Refinement - with an Application to Tagging</i> .....	148
Y.-C. Lin, T.-H. Chiang, K.-Y. Su (National Tsing Hua University)	
<i>Disambiguation of Super Parts of Speech (or SUPERTAGS):Almost Parsing</i> .....	154
A. K. Joshi, B.Srinivas (University of Pennsylvania)	
<i>Probabilistic Tagging with Feature Structures</i> .....	161
A. Kempe (Univ. of Stuttgart)	
<i>A Part-of-Speech-Based Alignment Algorithm</i> .....	166
K.-H. Chen (National Taiwan University)	
<i>Part-of-Speech Tagging with Neural Networks</i> .....	172
H. Schmid (Univ. of Stuttgart)	
<i>The Rumors System of Russian Synthesis</i> .....	177
M. I. Kanovich, Z. M.Shalyapina (Russian Academy of Sciences)	
<i>Multi-Tape Two-Level Morphology: A Case Study in Semitic Non-linear Morphology</i> .....	180
G. A. Kiraz (University of Cambridge)	
<i>An Evaluation to Detect and Correct Erroneous Characters Wrongly Substituted, Deleted and Inserted in Japanese and English Sentences Using Markov Models</i> .....	187
T. Araki, S. Ikehara, N. Tsukahara, Y. Komatsu (Fukui Univ./NTT Communication Sci. Labs.)	
<i>An Efficient Treatment of Japanese Verb Inflection for Morphological Analysis</i> .....	194
T. Hisamitsu, Y. Nitta (ARL, Hitachi Ltd.)	
<i>A Stochastic Japanese Morphological Analyzer Using a Forward-DP Backward-A*N-Best Search Algorithm</i> .....	201
M. Nagata (NTT Network Information Systems Labs.)	
<i>Backtracking-Free Dictionary Access Method for Japanese Morphological Analysis</i> .....	208
H. Maruyama (IBM Research)	
<i>Modularity in a Connectionist Model of Morphology Acquisition</i> .....	214
M. Gasser (Indiana University)	
<i>Syllable-Based Model for the Korean Morphology</i> .....	221
S.-S. Kang, Y. T. Kim (Hansung Univ./Seoul National Univ.)	
<i>Segmenting a Sentence into Morphemes Using Statistic Information between Words</i> .....	227
S. Nobesawa, J. Tsutsumi, T. Nitta, K. Ono, S. D. Jiang, M. Nakanishi (Keio University)	
<i>'Derivational' Paradigms in Morphology</i> .....	234
V. Pirrelli, S. Federici (ILC-CNR)	

## Lexicon

<i>An Architecture for a Universal Lexicon. A Case Study on Shared Syntactic Information in Japanese, Hindi, Bengali, Greek, and English</i> .....	243
N. Nomura, D. A. Jones, R. C. Berwick (Massachusetts Institute of Technology)	
<i>Adjuncts and the Processing of Lexical Rules</i> .....	250
G. V. Noord, G. Bouma (BCN RUG)	
<i>Noun Phrasal Entries in the EDR English Word Dictionary</i> .....	257
A. Koizumi, M. Arioka, C. Harada, M. Sugimoto (Japan Electric Dictionary Research Institute)	
<i>KASSYS: A Definition Acquisition System in Natural Language</i> .....	263
P. Hernert (L.I.F.O., Research Lab. de Vinci)	
<i>Complex Syntax: Building a Computational Lexicon</i> .....	268
R. Grishman, C. Macleod, A. Meyers (New York University)	
<i>Word Knowledge Acquisition, Lexicon Construction and Dictionary Compilation</i> .....	273
A. Sanfilippo (SHARP Laboratories of Europe, Ltd.)	
<i>Interlingual Lexical Organisation for Multilingual Lexical Databases in NADIA</i> .....	278
G. Sérasset (GETA IMAG-campus)	
<i>Manipulating Human-Oriented Dictionaries with Very Simple Tools</i> .....	283
J. Gaschler, M. Lafourcade (GETA, IMAG-campus)	
<i>Towards Linguistic Knowledge Discovery Assistants: Application to Learning Lexical Properties of Chinese Characters</i> .....	287
G. Fafiotte, F. Tcheou (GETA, IMAG)	
<i>Logic Compression of Dictionaries for Multilingual Spelling Checkers</i> .....	292
B. Meddeb-Hamrouni (GETA, IMAG-campus)	
<i>Construction of a Bilingual Dictionary Intermediated by a Third Language</i> .....	297
K. Tanaka, K. Umemura (Univ. of Tokyo/NTT Basic Research Labs.)	
<i>Co-occurrence Vectors from Corpora vs. Distance Vectors from Dictionaries</i> .....	304
Y. Niwa, Y. Nitta (ARL, Hitachi Ltd.)	
<i>Analysis of Scene Identification Ability of Associative Memory with Pictorial Dictionary</i> .....	310
T. Tsunoda, H. Tanaka (University of Tokyo)	

## Generation

<i>Anticipating the Reader's Problems and the Automatic Generation of Paraphrases</i> .....	319
N. Lenke (Univ. of Duisburg)	
<i>TGE: Tinks Generation Environment</i> .....	324
A. Ageno, F. Ribas, G. Rigau, H. Rodríguez, A. Samiotou (Univ. Politècnica de Catalunya)	
<i>Planning Argumentative Texts</i> .....	329
X. Huang (Universität des Saarlandes)	
<i>A Hybrid Approach to the Automatic Planning of Textual Structures</i> .....	334
G. Zhu, N. Shadbolt (Nottingham University)	
<i>Generating Multilingual Documents from a Knowledge Base: The TECHDOC Project</i> .....	339
D. Rosner, M. Stede (FAW Ulm)	
<i>Abstract Generation Based on Rhetorical Structure Extraction</i> .....	344
K. Ono, K. Sumita, S. Miike (Toshiba Corp.)	
<i>The Correct Place of Lexical Semantics in Interlingual MT</i> .....	349
L. Levin, S. Nirenburg (Carnegie Mellon University)	

<i>Default Handling in Incremental Generation</i> .....	356
K. Harbusch, G. Kikui, A. Kilger (German Research Center for Artificial Intelligence)	
<i>English Generation from Interlingua by Example-Based Method</i> .....	363
E. Komatsu, J. Cui, H. Yasuhara (Japan Electric Dictionary Res. Inst.)	
<i>On Lexically Biased Discourse Organization in Text Generation</i> .....	369
L. Wanner (University of Stuttgart)	

### Parsing

<i>Concurrent Lexicalized Dependency Parsing: The Parse Talk Model</i> .....	379
N. Bröker, U. Hahn, S. Schacht (Freiburg University)	
<i>Notes on LR Parser Design</i> .....	386
C. Samuelsson (Swedish Institute of Computer Science)	
<i>Parsing a Flexible Word Order Language</i> .....	391
V. Pericliev, A. Grigorov (Institute of Mathematics with Computing Center, Bulgaria)	
<i>Parsing as Tree Traversal</i> .....	396
D. Gerdemann (Universität Tübingen)	
<i>LR(k)-Parsing of Coupled-Context-Free Grammars</i> .....	401
G. Pitsch (Universität des Saarlandes)	
<i>Constructing Lexical Transducers</i> .....	406
L. Karttunen (Rank Xerox Research Centre, Grenoble)	
<i>An HPSG Parser Based on Description Logics</i> .....	412
J. Joachim Quantz (Technische Universität Berlin)	
<i>An Efficient Parser Generator for Natural Language</i> .....	417
M. Ishii, K. Ohta, H. Saito (Fujitsu Inc./Apple Technology, Inc./Keio Univ.)	
<i>Exploring the Role of Punctuation in Parsing Natural Text</i> .....	421
B. E.M. Jones (University of Edinburgh)	
<i>The "Whiteboard" Architecture: A Way to Integrate Heterogeneous Components of NLP Systems</i> .....	426
C. Boitet, M. Seligman (GETA, IMAG/ATR Interpreting Telecommunications Res. Labs)	
<i>Two Parsing Algorithms by Means of Finite State Transducers</i> .....	431
E. Roche (Mitsubishi Electric Research Labs.)	
<i>DISCO—An HPSG-Based NLP System and its Application for Appointment Scheduling</i> ---	436
H. Uszkoreit, R. Backofen, S. Busemann, A. K. Diagne, E. A. Hinkelman, W. Kasper, B. Kiefer, H.-U. Krieger, K. Netter, G. Neumann, S. Oepen, S. P. Spackman (DFKI)	
<i>A Corpus-Based Learning Technique for Building a Self-Extensible Parser</i> .....	441
R.-L. Liu, V.-W. Soo (National Tsing-Hua University)	
<i>A "Not-so-shallow" Parser for Collocational Analysis</i> .....	447
R. Basili, M.T. Paziienza, P. Velardi (Università di Roma)	
<i>A Modular Architecture for Constraint-based Parsing</i> .....	454
F. Barthélemy, F. Rouaix (Universidade Nova de Lisboa/INRIA Rocquencourt)	
<i>Minimal Change and Bounded Incremental Parsing</i> .....	461
M. Wirén (Universität des Saarlandes)	
<i>Emergent Parsing and Generation with Generalized Chart</i> .....	468
K. Hashida (Electrotechnical Laboratory, Japan)	
<i>Syntactic-Head-Driven Generation</i> .....	475
E. König (Institute for Computational Linguistics, Germany)	

<i>PRINCIPAR-An Efficient, Broad-coverage, Principle-based Parser</i> .....	482
D. Lin (University of Manitoba)	
<i>Concurrent Lexicalized Dependency Parsing: A Behavioral View on Parse Talk Events</i> ---	489
S. Schacht, U. Hahn, N. Broker (Freiburg University)	
<i>Parsing Turkish Using the Lexical Functional Grammar Formalism</i> .....	494
Z. Güngördü, K. Oflazer (University of Edinburgh/Bilkent Univ.)	
<i>LHIP: Extended DCGs for Configurable Robust Parsing</i> .....	501
A. Ballim, G. Russell (ISSCO, University of Geneva)	
<i>Categorical Grammar and Discourse Representation Theory</i> .....	508
R. Muskens (Institute for Language Technology and Artificial Intelligence)	
<i>Towards Automatic Extraction of Monolingual and Bilingual Terminology</i> .....	515
B. Daille, E. Gaussier, J.-M. Langé (Talana Univ. Paris 7/Centre Scientifique IBM France)	

### Computational Linguistics

<i>FAX: An Alternative to SGML</i> .....	525
K. W. Church, W. A. Gale, J. I. Helfman, D. D. Lewis (AT&T Bell Labs.)	
<i>Referring to World Objects with Text and Pictures</i> .....	530
E. André, T. Rist (DFKI)	
<i>A Two-level Morphological Analysis of Korean</i> .....	535
D.-B. Kim, S.-J. Lee, K.-S. Choi, G.-C. Kim (Korea Advanced Institute of Science and Technology)	
<i>Character-based Collocation for Mandarin Chinese</i> .....	540
C.-R. Huang, K.-J. Chen, Y.-Y. Yang (Academia Sinica/National Taiwan Univ.)	
<i>Lexical Knowledge Representation in an Intelligent Dictionary Help System</i> .....	544
E. Agirree, X. Arregi, X. Artola, A. Díaz de Ibarra, K. Sarasola (Univ. of Basque Country)	
<i>Reversible Resolution with an Application to Paraphrasing</i> .....	551
M. Hurst (The University of Sheffield)	
<i>Classifier Assignment by Corpus-Based Approach</i> .....	556
V. Sornlertlamvanich, W. Pantachat, S. Meknavin (Linguistics and Knowledge Science Lab., Ministry of Science Technology and Environment, Thailand)	

### Corpus-based NLP

<i>Annotating 200 Million Words: The Bank of English Project</i> .....	565
T. Järvinen (University of Helsinki)	
<i>Restructuring Tagged Corpora with Morpheme Adjustment Rules</i> .....	569
T. Tashiro, N. Uratani, T. Morimoto (ATR Interpreting Telecommunications Research Labs.)	
<i>Encoding Standards for Large Text Resources: The Text Encoding Initiative</i> .....	574
N. Ide (Vassar College)	
<i>INTEX: A Corpus Processing System</i> .....	579
M. D. Silberstein (Université Paris 7)	
<i>An IBM-PC Environment for Chinese Corpus Analysis</i> .....	584
R. W. P. Luk (City Polytechnic of Hong Kong)	
<i>Multext: Multilingual Text Tools and Corpora</i> .....	588
N. Ide, J. Véronis (CNRS & Université de Provence)	



<i>A Parser Coping with Self-Repaired Japanese Utterance and Large Corpus-Based Evaluation</i> .....	593
Y. Sagawa, N. Ohnishi, M. Sugie (Nagoya University)	
<i>A Tool for Collecting Domain Dependent Sortal Constraints from Corpora</i> .....	598
F. Andry, M. Gawron, J. Dowding, R. Moore (SRI International/CAP GEMINI Innovation)	
<i>Building a Lexical Domain Map from Text Corpora</i> .....	604
T. Strzalkowski (New York University)	
<i>A New Method of N-gram Statistics for Large Number of n and Automatic Extraction of Words and Phrases from Large Text Data of Japanese</i> .....	611
M. Nagao, S. Mori (Kyoto University)	
<i>Non-directionality and Self-Assessment in an Example-based System Using Genetic Algorithms</i> .....	616
Y. Lepage (Universiti Sains Malaysia)	
<i>CLAWS4: The Tagging of the British National Corpus</i> .....	622
G. Leech, R. Garside, M. Bryant (Lancaster University)	
<i>Syntactic Analysis of Natural Language Using Linguistic Rules and Corpus-Based Patterns</i> ----	629
P. Tapanainen, T. Järvinen (Rank Xerox Research Centre/Univ. of Helsinki)	

## Table of Contents (Vol. II)

### Semantics

<i>Word Sense Acquisition for Multilingual Text Interpretation</i> .....	665
P. S. Jacobs (GE Research and Development Center)	
<i>A System of Verbal Semantic Attributes Focused on the Syntactic Correspondence between Japanese and English</i> .....	672
H. Nakaiwa, A. Yokoo, S. Ikehara (NTT Communication Science Labs.)	
<i>Semantics of Complex Sentences in Japanese</i> .....	679
H. Nakagawa, S. Nishizawa (Yokohama National University)	
<i>Content Characterization Using Word Shape Tokens</i> .....	686
P. Sibun, D. S.Farrar (Fuji Xerox Palo Alto Lab.)	
<i>The Nature of Near-synonymic Relations</i> .....	691
C. DiMarco (University of Waterloo)	
<i>Virtual Polysemy</i> .....	696
A. Sanfilippo, K. Benkerimi, D. Dwehus (Sharp Labs. of Europe)	
<i>Building a Windows-based Bilingual Functional Semantic Processor</i> .....	701
J. J. Webster (City Polytechnic of Hong Kong)	
<i>On the Proper Role of Coercion in Semantic Typing</i> .....	706
J. Pustejovsky, P. Bouillon (Brandeis Univ./Univ. of Geneva)	
<i>Word Sense Ambiguation:Clustering Related Senses</i> .....	712
W. B. Dolan (Microsoft Corp.)	
<i>A Best-match Algorithm for Broad-coverage Example-based Disambiguation</i> .....	717
N. Uramoto (IBM Japan Ltd.)	
<i>Drawing Pictures with Natural Language and Direct Manipulation</i> .....	722
M. Hiyoshi, H. Shimazu (NEC Corp.)	
<i>Verbal Case Frame Acquisition from a Bilingual Corpus:Gradual Knowledge Acquisition</i> ---	727
H. Tanaka (NHK Science & Technical Research Labs.)	
<i>An Empirical Study on the Generation of Zero Anaphors in Chinese</i> .....	732
C.-L. Yeh, C. Mellish (University of Edinburgh)	
<i>Representing Information Need with Semantic Relations</i> .....	737
A. S. Chakravarthy (MIT Media Lab.)	
<i>Generalizing Automatically Generated Selectional Patterns</i> .....	742
R. Grishman, J. Sterling (New York University)	
<i>Incremental Interpretation: Applications, Theory, and Relationship to Dynamics Semantics</i>	748
D. Milward, R. Cooper (University of Edinburgh)	
<i>Word Sense Disambiguation and Text Segmentation Based on Lexical Cohesion</i> .....	755
M. Okumura, T. Honda (Japan Advanced Institute of Science and Technology)	
<i>Automatic Recognition of Verbal Polysemy</i> .....	762
F. Fukumoto, J. Tsujii (UMIST)	
<i>An Experiment on Learning Appropriate Selectional Restrictions from a Parsed Corpus</i> ---	769
F. R. Framis (Universitat Politècnica de Catalunya)	

<i>A Discrete Model of Degree Concept in Natural Language</i> .....	775
S. Kamei, K. Muraki (NEC Corp.)	
<i>Algorithm for Automatic Interpretation of Noun Sequences</i> .....	782
L. Vanderwende (Microsoft Corp.)	
<i>A Treatment of Functional Definite Descriptions</i> .....	789
H. Wada (Intelligent Text Processing, Inc.)	
<i>Bottom-up Earley Deduction</i> .....	796
G. Erbach (University of Saarland)	
<i>The Merged Upper Model: A Linguistic Ontology for German and English</i> .....	803
R. Henschel, J. Bateman (GMD/IIPI)	

### Syntax

<i>Modeling Dialogue by Functional Subcategorization</i> .....	813
J.R. Zubizarreta Aizpuru, C. Jones (U.P.V.–E.H.U./Univ. of Aberdeen)	
<i>Dutch Cross Serial Dependencies in HPSG</i> .....	818
G. Rentier (Tilburg University)	
<i>HPSG Lexicon without Lexical Rules</i> .....	823
K. Oliva (University of Saarland)	
<i>A Lexicon of Distributed Noun Representations Constructed by Taxonomic Traversal</i> .....	827
R. Sutcliffe, D. O'Sullivan, F. Meharg (University of Limerick)	
<i>Multi-modal Definite Clause Grammar</i> .....	832
H. Shimazu, S. Arita, Y. Takashima (NEC Corp.)	
<i>Hypothesis Selection in Grammar Acquisition</i> .....	837
M. Kiyono, J. Tsujii (UMIST)	
<i>Achieving Flexibility in Unification Formalisms</i> .....	842
L. Strömbäck (Linköping University)	
<i>TWP: How to Assist English Production on Japanese Word Processor</i> .....	847
K. Muraki, S. Akamine, K. Satoh, S. Ando (NEC Corp.)	
<i>Long-distance Dependencies and Applicative Universal Grammar</i> .....	853
S. Shaumyan, F. Segond (Yale University/Rank Xerox Res. Centre)	
<i>A Reestimation Algorithm for Probabilistic Recursive Transition Network</i> .....	859
Y. S. Han, K.-S. Choi (Korea Advanced Institute of Science and Technology)	
<i>Analysis of Japanese Compound Nouns Using Collocational Information</i> .....	865
Y. Kobayashi, T. Tokunaga, H. Tanaka (Tokyo Institute of Technology)	
<i>Free-ordered CUG on Chemical Abstract Machine</i> .....	870
S. Tojo (Mitsubishi Research Institute, Inc.)	
<i>Computing FIRST and FOLLOW Functions for Feature-theoretic Grammars</i> .....	875
A. Trujillo (University of Cambridge)	
<i>Focus on "Only" and "Not"</i> .....	881
A. Ramsay (University College Dublin)	
<i>Structure Sharing Problem and its Solution in Graph Unification</i> .....	886
K. Kogure (NTT Basic Research Labs.)	
<i>TDL-A Type Description Language for Constraint-based Grammars</i> .....	893
H.-U. Krieger, U. Schäfer (German Research Center for Artificial Intelligence)	
<i>On the Portability of Complex Constraint-based Grammars</i> .....	900
C.J. Rupp, R. Johnson (IDSIA)	

<i>A Grammar Based Approach to a Grammar Checking of Free Word Order Languages</i> ----	906
V. Kubon, M. Plátek (Charles University)	
<i>Table-driven Neural Syntactic Analysis of Spoken Korea</i> -----	911
W. Lee, G. Lee, J.-H. Lee (Phonag Institute of Science and Technology)	
<i>Universal Guides and Finiteness and Symmetry of Grammar Processing Algorithms</i> -----	916
M. Martinovic (New York University)	
<i>XTAG System-A Wide Coverage Grammar for English</i> -----	922
C. Doran, D. Egedi, B. A. Hockey, B.Srinivas, M. Zaidel (University of Pennsylvania)	
<i>Weakly Restricted Stochastic Grammars</i> -----	929
R. O. D. Akker, H. ter Doest (University of Twente)	
<i>Non-constituent Coordination:Theory and Practice</i> -----	935
D. Milward (University of Edinburgh)	
<i>Hypothesis Scoring over Theta Grids Information in Parsing Chinese Sentences with Serial Verb Constructions</i> -----	942
K. H.C. Lin, V.-W. Soo (National Tsing-Hua University)	
<i>An Efficient Syntactic Tagging Tool for Corpora</i> -----	949
M. Zhou, C. Huang (Tsinghua University)	
<i>The Correct and Efficient Implementation of Appropriateness Specifications for Typed Feature Structures</i> -----	956
D. Gerdemann, P. J. King (Universität Tübingen)	
<i>A Classification Method for Japanese Signs Using Manual Motion Descriptions</i> -----	961
H. Adachi, K. Kamata (Utsunomiya University)	

### **Speech & Phonology**

<i>Machine-readable Dictionaries in Text-to-speech Systems</i> -----	971
J. L. Klavans, E. Tzoukermann (Columbia University)	
<i>Issues in Text-to-speech for French</i> -----	976
E. Tzoukermann (AT&T Bell Labs.)	
<i>CHATR: A Generic Speech Synthesis System</i> -----	983
A. W. Black, P. Taylor (ATR Interpreting Telecommunications Labs.)	
<i>Pause as a Phrase Demarcator for Speech and Language Processing</i> -----	987
J. Hosaka, M. Seligman, H. Singer (ATR Interpreting Telephony Research Labs.)	
<i>The Parsody System: Automatic Prediction of Prosodic Boundaries for Text-to-speech</i> ---	992
S. Minnis (BT Labs.)	
<i>Anytime Algorithms for Speech Parsing?</i> -----	997
G. Görz, M. Kessler (University of Erlangen-Nürnberg)	
<i>Towards a Proper Linguistic and Computational Treatment of Scrambling: An Analysis of Japanese</i> -----	1002
S. Fong (NEC Research Institute, Inc.)	
<i>Phonological Derivation in Optimality Theory</i> -----	1007
M. T. Ellison (University of Edinburgh)	
<i>A Grammar and a Parser for Spontaneous Speech</i> -----	1014
M. Nakano, A. Shimazu, K. Kogure (NTT Basic Research Labs.)	
<i>Catching the Cheshire Cat</i> -----	1021
C. Johansson (Lund University)	

### Information Retrieval & Extraction

<i>A Dutch to SQL Database Interface Using Generalized Quantifier Theory</i> .....	1029
D. Speelman, G. Adriaens (University of Leuven)	
<i>A Methodology for Automatic Term Recognition</i> .....	1034
S. Ananiadou (Manchester Metropolitan University)	
<i>Knowledge Extraction from Texts: A Method for Extracting Predicate-argument Structures from Texts</i> .....	1039
F. Pugeault, P. Saint-Dizier, M.-G. Monteil (Université Paul Sabatier/EDF, D.E.R.)	
<i>Thesaurus-based Efficient Example Retrieval by Generating Retrieval Queries from Similarities</i> .....	1044
T. Utsuro, K. Uchimoto, M. Matsumoto, M. Nagao (Nara Institute of Science and Technology/Kyoto University)	
<i>Tools for Extracting and Structuring Knowledge from Texts</i> .....	1049
A. Ogonowski, M. L. Herviou, E. Dauphin (GSI-ERLI/AEROSPATIALE CCR/EDF)	
<i>N-Gram Cluster Identification During Empirical Knowledge Representation Generation</i> ..	1054
R. Collier (University of Sheffield)	
<i>Document Classification by Machine: Theory and Practice</i> .....	1059
L. Guthrie, E. Walker (New Mexico State University)	
<i>Pattern Matching in the Textract Information Extraction System</i> .....	1064
T. Kitani, Y. Eriguchi, M. Hara (Carnegie Mellon University)	
<i>Recognizing Text Genres with Simple Metrics Using Discriminant Analysis</i> .....	1071
J. Karlgren, D. Cutting (Swedish Institute of Computer Science/Apple Computer)	
<i>Bilingual Text Matching Using Bilingual Dictionary and Statistics</i> .....	1076
T. Utsuro, H. Ikeda, M. Yamane, Y. Matsumoto, M. Nagao (Nara Institute of Science and Technology/Kyoto University)	
<i>Towards a More User-friendly Correction</i> .....	1083
D. Genthial, J. Courtin, J. Ménézo (LGI-IMAG)	
<i>Reverse Queries in DATR</i> .....	1089
H. Langer (University of Osnabrück)	
<i>K-vec: A New Approach for Aligning Parallel Texts</i> .....	1096
P. Fung, K. W. Church (Columbia University/AT&T Bell Labs.)	

### Discourse & Pragmatics

<i>A Formal Representation of the Thematic-rhematic Structure of Sentences Based of a Typed A-calculus</i> .....	1105
Y. Uetake (Tokyo University of Mercantile Marine)	
<i>Customizing and Evaluating a Multilingual Discourse Module</i> .....	1109
C. Aone (Systems Research and Applications Corp. [SRA])	
<i>Consequence Relations in DRT</i> .....	1114
S. Akama, Y. Nakayama (Teikyo Univ. of Technology/Nihon Unisys Ltd.)	
<i>Collaboration on Reference to Objects that are not Mutually Known</i> .....	1118
P. G. Edmonds (University of Toronto)	
<i>Automatic Detection of Discourse Structure by Checking Surface Information in Sentences</i>	1123
S. Kurohashi, M. Nagao (Kyoto University)	

<i>Extending DRT with a Focusing Mechanism for Pronominal Anaphora and Ellipsis Resolution</i> .....	1128
J. Abraços, J. G. Lopes (CRIA/UNINOVA Faculdade de Ciências e Tecnologia)	
<i>Reference Resolution Using Semantic Patterns in Japanese Newspaper Articles</i> .....	1133
T. Wakao (University of Sheffield)	
<i>Exploiting Reference Interaction in Resolving Temporal Reference</i> .....	1138
K. Dohsaka (NTT Basic Research Labs.)	
<i>A Grammatico-statistical Approach to Discourse Partitioning</i> .....	1145
T. Nomoto, Y. Nitta (Hitachi Ltd., ARL)	
<i>Centering in Japanese: A Step Towards Better Interpretation of Pronouns and Zero-pronouns</i> .....	1151
S. Takada, N. Doi (Keio University)	
<i>Robust Method of Pronoun Resolution Using Full-text Information</i> .....	1157
T. Nasukawa (IBM Research)	
<i>Towards a Dynamic Theory of Belief-sharing in Cooperative Dialogues</i> .....	1164
H. Komatsu, N. Ogata, A. Ishikawa (Toin Corp./Univ. of Tsukuba/Sophia Univ.)	
<i>An Integrated Model for Anaphora Resolution</i> .....	1170
R. Mitkov (Institute of Mathematics)	
<i>Breaking Down Rhetorical Relations for the Purpose of Analysing Discourse Structures</i> --	1177
J. Fukumoto, J. Tsujii (UMIST)	
<i>Presupposition &amp; VP-Ellipsis</i> .....	1184
J. Bos (Universität des Saarlandes)	
<i>Communicating with Multiple Agents</i> .....	1191
E. A. Hinkelman, S. P. Spackman (DFKI)	
<i>A Rule-based Approach to Prepositional Phrase Attachment Disambiguation</i> .....	1198
E. Brill, P. Resnik (Massachusetts Institute of Technology/Sun Microsystems Labs.)	
<i>Discourse and Deliberation: Testing a Collaborative Strategy</i> .....	1205
M. A. Walker (Mitsubishi Electric Research Labs.)	
<i>A Bayesian Approach for User Modeling in Dialogue Systems</i> .....	1212
T. Akiba, H. Tanaka (Tokyo Institute of Technology)	

### Reserve Paper

<i>World Class Discovery for Postprocessing Chinese Handwriting Recognition</i> -----	1221
C.-H. Chang (Industrial Technology Research Institute)	
<i>A Simple Transformation for Offline-Parsable Grammars and Its Termination Properties</i> --	1226
M. Dymetman (Rank Xerox Research Center)	
<i>The Evaluation of Machine-Tractable Dictionaries</i> -----	1231
C.-M. Guo, C.-N. Huang, J.-P. Gong, J. Li (Tsinghua University)	
<i>Discontinuity and the Lambek Calculus</i> -----	1235
M. Hepple (University of Sheffield)	
<i>Lexical Functions and Machine Translation</i> -----	1240
D. Heylen, K.G. Maxwell, M. Verhagen (OTS)	
<i>Chinese Segmentation Disambiguation</i> -----	1245
W. Jin (New Mexico State University)	
<i>Typed Feature Structures as Descriptions</i> -----	1250
P.J. King (Eberhard-Karls-Universität)	
<i>Portuguese Analysis with Tree Adjoining Grammars</i> -----	1255
K.C. Kipper, V.L.S. de Lima (PUCRS)	
<i>Incremental Construction of a Lexical Transducer for Korean</i> -----	1262
H.-C. Kwon, L. Karttunen (Pusan National University)	
<i>Dynamic Logic with Possible World</i> -----	1267
R. Lu (Shanghai Jiao Tong University)	
<i>Humor-based Applications</i> -----	1270
G. Prószték, M. Pál, L. Tihanyi (Morphologic/OPKM Comp. Centre/Inst. for Linguistics)	
<i>Blending Segmentation with Tagging in Chinese Language Corpus Processing</i> -----	1274
Z. Qiang, Y. Shiwen (Peking University)	
<i>Syllable-based Phonetic Transcription by Maximum Likelihood Methods</i> -----	1279
R.A. Sharman (IBM UK Labs., Ltd.)	
<i>A Knowledge Acquisition and Management System for Morphological Dictionaries</i> -----	1284
P. Ten Hacken, S. Bopp, M. Doméning, D. Holz, A. Hsiung, S. Pedrazzini (Universitat Basel/Vrije Univ. Amsterdam/IDSIA)	
<i>NL Understanding with a Grammar of Constructions</i> -----	1289
W. Zadrozny, M. Szummer, S. Jarecki, D.E. Johnson, L. Morgenstern (IBM)	





## Author's Index

ABRACOS, J.-----	1128	CHURCH, K.W.-----	525, 1096
ADACHI, H.-----	961	COLLIER, R.-----	1054
ADRIAENS, G.-----	1029	COPPER, R.-----	748
AGENO, A.-----	324	CORNISH, T.-----	51
AGIRREE, E.-----	544	COURTIN, J.-----	1083
AIZPURU J.R., Z.-----	813	CRANIAS, L.-----	100
AKAMA, S.-----	1114	CUI, J.-----	363
AKAMINE, S.-----	64, 847	CUTTING, D.-----	1071
AKIBA, T.-----	1212	DAILLE, B.-----	515
AKIBA, Y.-----	57	DAJIANG, S.-----	227
AKKER, R.O.D.-----	929	DAUPHIN, E.-----	1049
ANANIADOU, S.-----	1034	DAVID, M.-----	935
ANDO, S.-----	847	DE HARRAZA, A.D.-----	544
ANDRE, E.-----	530	DE LIMA, V.L.S.-----	1255
ANDRY, F.-----	598	DIAGNE, A.K.-----	436
AONE, C.-----	1109	DIETMAR, R.-----	339
ARAKI, T.-----	187	DIMARCO, C.-----	691
ARIOKA, M.-----	257	DOEST, H.T.-----	929
ARITA, S.-----	832	DOHSAKA, K.-----	1138
ARREGI, X.-----	544	DOI, N.-----	1151
BACKOFEN, R.-----	436	DOLAN, W.B.-----	712
BAKER, K.L.-----	90	DOMENING, M.-----	1284
BALLIM, A.-----	501	DORAN, C.-----	922
BARTHELEMY, F.-----	454	DOWDING, J.-----	598
BASIL, R.-----	447	DWEHUS, D.-----	696
BATEMAN, J.-----	803	DYMETMAN, M.-----	1226
BENKERIMI, K.-----	696	EDOMONDS, P.G.-----	1118
BERWICK, R.C.-----	243	EGEDI, D.-----	922
BLACK, A.W.-----	983	ELLISON, M.T.-----	1007
BLANCHON, H.-----	115	ERBACH, G.-----	796
BOITET, C.-----	426	ERIGUCHI, Y.-----	1064
BOND, F.-----	32	FABIOTTE, G.-----	287
BOPP, S.-----	1284	FARRAR, D.S.-----	686
BOS, J.-----	1184	FARWELL, D.-----	125
BOUILLON, P.-----	706	FEDERICI, S.-----	234
BOUMA, G.-----	250	FONG, S.-----	1002
BRILL, E.-----	1198	FRANZ, A.M.-----	90
BROKER, N.-----	379, 489	FREDERIKNG, R.-----	125
BRYANT, M.-----	622	FUJITA, K.-----	51
BUSEMANN, S.-----	436	FUKUMOTO, F.-----	762
CARBONELL, J.G.-----	95	FUKUMOTO, J.-----	1177
CHAKRAVARTHY, A.S.-----	737	FUNG, P.-----	1096
CHANG, C.-H.-----	1221	FURUSE, O.-----	64, 105
CHEN, K.-H.-----	166	G.MAXWELL, K.-----	1240
CHEN, K.-J.-----	540	GALE, W.A.-----	525
CHIANG, T.-H.-----	148	GARSDIE, R.-----	622
CHOI, K.-S.-----	129, 535, 859		

## Author's Index

GASCHLER, J.-----	283	ISHIKAWA, A.-----	1164
GASSER, M.-----	214	JACOBS, P.S.-----	665
GAUSSIÉR, E.-----	515	JARECKI, S.-----	1289
GAWRON, M.-----	598	JARVINEN, T.-----	629
GAWRONSKA, B.-----	45, 120	JAVINEN, T.-----	565
GENTHIAL, D.-----	1083	JIN, W.-----	1245
GERDEMANN, D.-----	396, 956	JOACHIM, Q.J.-----	412
GONG, J.-P.-----	1231	JOHANSSON, C.-----	45, 1021
GORZ, G.-----	997	JOHNSON, R.-----	900
GRIGOROV, A.-----	391	JONES, B.E.M.-----	421
GRISHMAN, R.-----	268, 742	JONES, C.-----	813
GUNGORDU, Z.-----	494	JONES, D.A.-----	243
GUO, C.-M.-----	1231	JONSON, D.E.-----	1289
GUTHRIE, L.-----	1059	JORDAN, P.W.-----	90
HAHN, U.-----	379, 489	JOSHI, A.K.-----	154
HAN, Y.S.-----	859	KAMATA, K.-----	961
HARA, M.-----	1064	KAMEI, S.-I.-----	775
HARADA, C.-----	257	KANEDA, S.-----	57
HARBUSCH, K.-----	356	KANG, S.-S.-----	221
HASHIDA, K.-----	468	KANOVICH, M.I.-----	177
HELFMAN, J.I.-----	525	KARLGREN, H.-----	82
HENSCHÉL, R.-----	803	KARLGREN, J.-----	82, 1071
HEPPLE, M.-----	1235	KARTTUNEN, L.-----	406, 1262
HERNERT, P.-----	263	KASPER, W.-----	436
HERVIOU, M.L.-----	1049	KAWAI, J.-----	64
HEYLEN, D.-----	1240	KEMPE, A.-----	161
HINKELMAN, E.A.-----	436, 1191	KESSELER, M.-----	997
HIRAKAWA, H.-----	25, 76	KIEFER, B.-----	436
HISAMITSU, T.-----	194	KIKUI, G.-----	356
HIYOSHI, M.-----	722	KILGER, A.-----	356
HOCKEY, B.A.-----	755	KIM, D.-B.-----	129, 535
HONDA, T.-----	922	KIM, G.-----	129
HOLZ, D.-----	1284	KIM, G.-C.-----	535
HOSAKA, J.-----	987	KIM, H.-----	129
HSIUNG, A.-----	1284	KIM, Y.T.-----	221
HUANG, C.-----	949	KING, P.J.-----	956, 1250
HUANG, C.-N.-----	1231	KINOSHITA, S.-----	25
HUANG, C.-R.-----	540	KIPPER, K.C.-----	1255
HUANG, X.-----	329	KIRAZ, G.A.-----	180
HURST, M.-----	551	KITANI, T.-----	1064
HUSSEIN, A.-----	57	KIYONO, M.-----	837
IDE, N.-----	574, 588	KLAVANS, J.L.-----	971
IIDA, H.-----	64, 105	KOBAYASHI, Y.-----	865
IKEDA, H.-----	1076	KOGURE, K.-----	886, 1014
IKEHARA, S.-----	32, 187,	KOIZUMI, A.-----	257
	672	KOMATSU, E.-----	363
ISHII, M.-----	417	KOMATSU, H.-----	1164

## Author's Index

KOMATSU, Y.-----	187	MORGENSTERN, L.-----	1289
KONIG, E.-----	475	MORI, S.-----	611
KRIEGER, H.-U.-----	436, 893	MORIMOTO, T.-----	569
KUBON, V.-----	906	MURAKI, K.-----	775, 847
KUMANO, A.-----	25, 76	MUSKENS, R.-----	508
KUROHASHI, S.-----	1123	NAGAO, M.-----	611, 1044, 1076, 1123
KWEON, C.-----	129	NAGATA, M.-----	201
KWON, H.-C.-----	1262	NAKAGAWA, H.-----	679
LAFOURCADE, M.-----	283	NAKAIWA, H.-----	672
LANGE, J.-M.-----	515	NAKANISHI, M.-----	227
LANGER, H.-----	1089	NAKANO, M.-----	1014
LEE, G.-----	911	NAKAYAMA, Y.-----	1114
LEE, J.-H.-----	911	NASUKAWA, T.-----	1157
LEE, S.-----	129	NETTER, K.-----	436
LEE, S.-J.-----	535	NEUMANN, G.-----	436
LEE, W.-----	911	NIRENBURG, S.-----	125, 349
LEECH, G.-----	622	NISHIZAWA, S.-I.-----	679
LENKE, N.-----	319	NITTA, T.-----	227
LEPAGE, Y.-----	616	NITTA, Y.-----	194, 304, 1145
LEVIN, L.-----	349	NIWA, Y.-----	304
LEWIS, D.D.-----	525	NOBESAWA, S.-----	227
LI, J.-----	1231	NOMOTO, T.-----	1145
LIN, D.-----	482	NOMURA, N.-----	243
LIN, K.H.C.-----	942	NORDNER, A.-----	45
LIN, Y.-C.-----	148	NORDSTROM, M.-----	82
LIU, R.-L.-----	441	NYBERG 3rd, E.H.-----	90, 95
LOPES, J.G.-----	1128	O'SULLIVAN, D.-----	827
LU, R.-----	1267	OEPEN, S.-----	436
MACLEOD, C.-----	268	OFLAZER, K.-----	494
MARTINOVIC, M.-----	916	OGATA, N.-----	1164
MARUYAMA, H.-----	208	OGONOWSKI, A.-----	1049
MATIASEK, J.-----	141	OGURA, K.-----	32
MATSUMOTO, M.-----	1044	OHNISHI, N.-----	593
MATSUMOTO, Y.-----	1076	OHTA, K.-----	417
MEDDEB HAMROUNI, B.-----	292	OKUMURA, M.-----	755
MEHARG, F.-----	827	OLIVA, K.-----	823
MELLISH, C.-----	732	ONO, K.-----	227, 344
MENEZO, J.-----	1083	PAL, M.-----	1270
MEYERS, A.-----	268	PANTACHAT, W.-----	556
MIKE, S.-----	344	PAPAGEORGIOU, H.-----	100
MILWARD, D.-----	748	PAZIENZA, M.T.-----	447
MINNIS, S.-----	992	PEDRAZZINI, S.-----	1284
MITAMURA, T.-----	90, 95	PERICLIEV, V.-----	391
MITKOV, R.-----	1170	PETTERSSON, P.-----	82
MODINA, L.S.-----	112	PIPERIDIS, S.-----	100
MONTEIL, M.-G.-----	1039		
MOORE, R.-----	598		

## Author's Index

PIRRELLI, V.-----	234	SOO, V.-W.-----	441, 942
PITTSCH, G.-----	401	SORNLERLAMVANICH, V.-----	556
PLATEK, M.-----	906	SPACKMAN, S.P.-----	436, 1191
PROSZEKY, G.-----	1270	SPEELMAN, D.-----	1029
PUGEAULT, F.-----	1039	SRINIVAS, B.-----	154, 922
PUSTEJOVSKY, J.-----	706	STEDE, M.-----	339
QIANG, Z.-----	1274	STERLING, J.-----	742
RALF, S.-----	69	STROMBACK, L.-----	842
RAMSAY, A.-----	881	STRZALKOWSKI, T.-----	604
RENTIER, G.-----	818	SU, K.-Y.-----	148
RESNIK, P.-----	1198	SUGIE, N.-----	593
RIBAS FRAMIS, F.-----	769	SUGIMOTO, M.-----	257
RIBAS, F.-----	324	SUGIMURA, R.-----	51
RIGAU, G.-----	324	SUMITA, K.-----	344
RIST, T.-----	530	SURAPANT, M.-----	556
RO, A.-----	134	SUTCLIFFE, R.FE.-----	827
ROCHE, E.-----	431	SZUMMER, M.-----	1289
RODRIGUEZ, H.-----	324	TAKADA, S.-----	1151
ROUAIX, F.-----	454	TAKASHIMA, Y.-----	832
RUPP, C.J.-----	900	TAKEDA, K.-----	85
RUSSELL, G.-----	501	TANAKA, H.-----	310, 727
SAGAWA, Y.-----	593	TANAKA, Ho.-----	865, 1212
SAINT-DIZIER, P.-----	1039	TANAKA, K.-----	297
SAITO, H.-----	417	TAPANAINEN, P.-----	629
SAMIOTOU, A.-----	324	TASHIRO, T.-----	569
SAMUELSSON, C.-----	386	TAYLOR, P.-----	983
SANFILIPPO, A.-----	273, 696	TCHEOU, F.-----	287
SARASOLA, K.-----	544	TEN HACKEN, P.-----	1284
SATOH, K.-----	847	TIHANYI, L.-----	1270
SCHACHT, S.-----	379, 489	TOJO, S.-----	870
SCHAFFER, U.-----	893	TOKUNAGA, T.-----	865
SCHMID, H.-----	172	TROST, H.-----	141
SEGOND, F.-----	853	TRUJILLO, A.-----	875
SELIGMAN, M.-----	426, 987	TSUJII, J.-----	762, 837, 1177
SERASSET, G.-----	278	TSUKAHARA, N.-----	187
SHADBOLT, N.-----	334	TSUNODA, T.-----	310
SHALYAPINA, Z.M.-----	177	TSUTSUMI, J.-----	227
SHARMAN, R, A.-----	1279	TZOUKERMANN, E.-----	971, 976
SHAUMYAN, S.-----	853	UCHIMOTO, K.-----	1044
SHIMAZU, A.-----	1014	UEMURA, K.-----	297
SHIMAZU, H.-----	722, 832	UETAKE, Y.-----	1105
SHIWEN, Y.-----	1274	URAMOTO, N.-----	717
SIBUN, P.-----	686	URATANI, N.-----	569
SIGURD, B.-----	120	USZKOREIT, H.-----	436
SILBERZTEIN, M.D.-----	579	UTSURO, T.-----	1044, 1076
SINGER, H.-----	987	VAN NOORD, G.-----	250
SOBASHIMA, Y.-----	64		

## Author's Index

VANDERWENDE, L.	782
VELARDI, P.	447
VERHAGEN, M.	1240
VERONIS, J.	588
WADA, H.	789
WAHROLEN, B.	82
WAKAO, T.	1133
WALKER, E.	1059
WALKER, M.A.	1205
WANNER, L.	369
WATANABE, H.	39
WEBSTER, J.J.	701
WILKS, Y.	125
WILLENERS, C.	45
WING PONG LUK, R.	584
WIREN, M.	461
YAMANE, M.	1076
YAMAZAKI, T.	57
YANG, Y.-Y.	540
YASUHARA, H.	363
YEH, C.-L.	732
YOKOO, A.	57, 672
ZADROZNY, W.	1289
ZAIDEL, M.	922
ZHOU, M.	949
ZHU, G.	334
ZOYA, M.S.	112