from philosophical and computational points of view. Subsequently, the attempt to build language processing programs that had a sound philosophical basis was a distinctive feature of the Unit's work. This approach to language processing, and the specific form it took in the proposed use of a thesaurus as the main vehicle for semantic operations, will probably come to be seen as the Unit's major contribution to the field as a whole, and it was Margaret who was primarily responsible for them. Her vision of language processing and its possibilities was remarkable for a time when computers were very rudimentary: indeed much of the CLRU's work had to be done on the predecessors of computers, namely punched card machines. Equally, Margaret's determination in establishing and maintaining the Unit, with the enormous effort in fund raising that this involved, was very striking: the fact that the Unit could continue for several decades, and in particular through periods when support for work in the area was hard to come by, is a tribute to Margaret's persistence. It is difficult for us now, in these days of artificial intelligence in the ordinary market place, and very powerful personal computers, to realise how hard it was to get the financial resources needed for language-processing research, and equally, the technical resources to do the actual experiments.

Perhaps the best comment on Margaret's initiative in embarking on language processing research, and specifically on machine translation work, comes from a somewhat unexpected source. Machine translation, after an initial period of high hopes, and some large claims, was cast into outer darkness by the funding agencies who saw little return for their money, and has only recently revived. Reviewing 25 years of artificial intelligence research in his presidential address to the American Association for Artificial Intelligence in 1985, Woody Bledsoe, one of the longstanding leaders of the field, though in areas quite outside language, said of those who attempted machine translation in the fifties and sixties: they may have failed, but they were right to try; we have learned so much from their attempts to do something so difficult.

What she and CLRU were trying to do was far ahead of its time. Efforts were made to tackle fundamental problems which overstrained the capacity of the computers of the day and the programming tools then available. Despite every kind of problem, the Unit produced numerous publications on language and related subjects including information retrieval and automatic classification. For over ten years the Unit's presence was strongly felt in the field, always with an emphasis on basic semantic problems of language understanding. Margaret had no time for those who felt that all that needed doing was syntactic parsing, or that complete parsing was necessary before you did anything else. Now that the semantics of language are regarded as a basic part of its understanding by machine, the ideas around CLRU seem curiously modern.

Margaret's main contribution to the life of CLRU was in the continual intellectual stimulus she gave to the Unit's research, and through this to the larger natural language processing community: she had wide ranging concerns, and lateral ideas, which led her, for example, to propose the thesaurus as a means of carrying out many distinct language processing tasks, like indexing and translation. Margaret's emphasis on algorithms, and on testing them, was particularly important for the development of the Unit's work on language processing; but her ideas were notable, especially for those who worked with her, not just for their technical qualities, but for their sheer joyousness.

Her colleagues and students will always remember her for her inspiration, not her written papers: she made questions of philosophy and language processing seem both closely related and, above all, desperately important. On their joint solutions hung the solutions of a range of old and serious questions about life and the universe. In this, as so much else, she was a Wittgensteinian but, unlike him, she was optimistic and believed that, with the aid of the digital computer it could be done.

She could not only inspire and create, but terrify and destroy: she had the dual aspects of Shiva, an analogy she would have appreciated. Even in her seventies, still funded by European Commission grants, her hair still black because a gypsy had told her forty years before that it would not go grey if she never washed it, she would rise slowly and massively at the end of a talk, bulky in her big, belted, fisherman's pullover, to attack a speaker, who would be quaking if he had any idea what might be coming. The attack always began softly and slowly, dovelike and gentle, gathering speed and roughness as it went. As many readers may remember, there was no knowing where it might lead.

Martin Kay Roger Needham Karen Sparck Jones Yorick Wilks

#### CALLS FOR PAPERS

#### 2ND PAN PACIFIC COMPUTER CONFERENCE ON INFORMATION TECHNOLOGY: EMERGING OPPORTUNITIES AND CHALLENGES

#### 26-29 August 1987, Singapore

Sponsor: Singapore Computer Society

Co-Sponsors: International Federation of Information Processing, American Federation of Information Processing Societies, South East Asian Region Computer Confederation, National Computer Board, Singapore Federation of the Computer Industry

The 2nd Pan Pacific Computer Conference is an international conference for computer professionals and managers of the Pacific Basin countries. The conference will focus on the practical application of emerging technologies in the future development of countries in the Asia-Pacific region. Two thousand delegates from the Pacific Basin are expected to attend this important event.

There will be an Exhibition in parallel which will be one of the largest exhibitions to be held in the region.

## TOPICS

Papers are to be invited in the following technological areas:

- · Personal computers
- Office systems
- Communications technology
- Database management systems
- Applications development languages

Papers are also invited on application of these technologies to the following industries:

- Banking
- Manufacturing
- · Electronic publishing
- Trade facilitation
- Transportation
- Government
- Natural resources exploitation

## SUBMISSION OF PAPERS

Three copies of double-spaced manuscript in English (maximum 5000 words) should be submitted by 15 March 1987 to

Dr. Juzar Motiwalla, Director Institute of Systems Sciences National University of Singapore Heng Mui Keng Terrace Singapore 0511

## IMPORTANT DATES

Papers due	15 March 1987
Notification of acceptance	15 April 1987
Final version due	15 May 1987

## INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE

# 7-11 September 1987, Donostia-San Sebastian, Basque Country

The Second World Basque Congress, which will be held between August and December 1987, is sponsored by the Basque government and is organized with the collaboration of the most prestigious academic and cultural institutions of the Basque Country. It will be a multidisciplinary event, consisting of 35 conferences and workshops, which will cover different areas and fields of knowledge. The sessions and events will take place in San Sebastián, Vitoria, and Bilbao.

The Second World Basque Congress has a double objective.

**Calls for Papers** 

- First, to deal with present-day topics from a scientific and universal viewpoint, in an attempt to find solutions to social problems.
- Second, to offer an adequate framework for the strengthening of ties between the Basque Country and the international scientific community, at the same time serving as an appropriate stage for the exchange of ideas, methods, and recommendations in the scientific, technical, and cultural fields.

The International Conference on Artificial Intelligence is one of the Conferences of this Congress. Its program will consists of invited and contributed papers, of which the latter will be accepted after evaluation by the Scientific Committee, made up of a group of specialists.

A book and machine exchibition will be held in parallel with the Conference.

Tools and Applications: Industrial and commercial organizations will exhibit operational products or advanced prototypes.

## **ORGANIZING COMMITTEE**

Department of Computer Science – University of the Basque Country

LABEIN (Research Laboratory) - Bilbao

IKERLAN (Research Laboratory) - Arrasate

with the cooperation of

- AEPIA (the Spanish Association of Artificial Intelligence)
- SEPLN (the Spanish Society of Natural Language Processing)

## PROVISIONAL PROGRAM

The Conference on Artificial Intelligence will be structured in three blocks:

1st Block: General Interest. The objective is to give a general overview, including the history and future prospects of Artificial Intelligence. This first block is intended for all of those professionals, both technicians and managers, for whom in the very near future Artificial Intelligence will be an essential tool. The aspects to be covered in the block will be:

- The historical development of Artificial Intelligence
- Natural Language Processing
- Expert Systems
- Robotics: Vision and Speech Processing
- Architectures for Artificial Intelligence

**2nd Block: Applications.** All application areas are available; possible topic areas include, but are not limited to, the following:

- Expert Systems

- Banking, Finance, Economics
- The Legal System
- Office Automation
- Computer-aided Manufacturing: Quality Control, Planning, Process Control
- Technical Diagnosis
- Computer-aided Education
- · Medicine, Biology, Pharmacology

- Robotics
- Vision and Speech Processing
- Natural Language Processing
  - Machine Translation

**3rd Block: Advanced Research (Tutorials).** These will be sessions assinged to researchers in some of the concrete areas of Artificial Intelligence. The sessions will be grouped into tutorials. The topics to be discussed are the following:

- Machine Translation
- Expert Systems
- Intelligent Tutors
- Advanced Techniques of Reasoning

- Integration of Data Bases and Artificial Intelligence

## INSTRUCTIONS

- 1. The official languages of the Congress are Euskara, Spanish, French, and English.
- 2. The participation fee to the Conference is 20,000 Pts. if paid before 30 June 1987, and 30,000 Pts. afterwards. Participants will receive a copy of the invited and contributed papers presented at the Conference and will be able to attend all the sessions. They are also entitled to participate free of charge in the events that accompany the Conference, which will be a minimum of one official reception, one official dinner, and one cultural event.
- 3. Those people who only wish to attend the sessions of the Conference should send to

Secretaria del II Congreso Mundial Vasco Paseo de la Senda, 15 - bajo 01007 Vitoria-Gasteiz Basque Country - SPAIN

this information (omitting any quoted paragraph that is not pertinent to you):

Full name (please print)

- Address, including country and telephone number
- "I should like to attend the Conference (I enclose a photocopy of the slip confirming the payment of \_\_\_\_\_\_ Pts.)." or "I should like to present a paper at the Conference in block number
  - \_\_\_\_\_whose provisional title is (insert title)."
- "I should like to continue receiving information about the development of the Conference."
- "I should like to receive information about accommodation and other information about the organization of the Conference."
- "I suggest that you also send information to the following people or institutions (names and addresses):"

your signature and the date

You may obtain the slip confirming payment of the correct participation fee by arranging a bank transfer to the account

II Congreso Mundial Vasco Conference on Artificial Intelligence N. 32-104401-0 Caja de Ahorros Municipal de Bilbao Calle Fueros, 13 Vitoria-Gasteiz Basque Country - SPAIN

- 4. Those people who wish to present a paper at this Conference should so indicate in the information being sent to the Secretaria (see 3.). The Secretariat will then send, by return post, the official forms for writing the **abstract** of the paper, which should be in the Secretariat by **15 April 1987.** (Abstracts not written on the official form will not be accepted.)
- 5. The Scientific Committee will choose, after anonymous marking, from the abstracts sent, those papers to be presented at the Conference, and this information will be transmitted to the authors as soon as possible. Following this notification, the **complete text** of the papers chosen must be at the Secretariat by **30 July 1987.**

Those people who have had their papers chosen will not have to pay the registration fee. Because of this, we ask those people interested in presented a paper not to pay the participation fee mentioned in 3. Hence a new period of registration will be opened at the reduced rate for those people who do not have their papers chosen.

Austrian Meeting on Artificial Intelligence

## 22-25 September 1987, Technical University of Vienna

In 1987, the Austrian Society for Artificial Intelligence (ÖGAI) will organize its third meeting, since those in 1985 (at the University of Vienna) and in 1986 (in Ottenstein, together with the GWAI-86) have been have successful. This year it will take place at the Technical University of Vienna.

The scientific program will be held on September 24 and 25, 1987, from 9.00 am. to 5.00 pm. Papers concerning many aspects of AI will be presented, from subfields including the following:

- AI tools
- Impacts of AI
- Automatic Programming
- Vision
- Cognitive Science
- Expert Systems
- Learning
- Natural Language
- Planning and Search
- Robotics
- Theorem Proving
- Knowledge Representation

There will be *invited papers*, *refereed papers* (maximum eight pages), and *short papers* (maximum four pages). The papers will be published in a **conference proceedings** (included in the conference fee).

The conference languages are English and German.

In addition to the scientific program, tutorials offering an introduction to AI will be held on 22 and 23 September 1987.

During the whole meeting, there will be the possibility for **exhibitions**. Those interested are expected to contact the chairman as early as possible.

## CHAIRMAN

E. Buchberger, Vienna

## **PROGRAM COMMITTEE**

- W. Horn, Vienna A. Kobsa, Saarbrücken
- W. Nejdl, Vienna
- J. Retti, Vienna
- H. Trost, Vienna
- H. Kaindl, Vienna
- A. Leitsch, Vienna
- B. Neumann, Hamburg
- R. Trappl, Vienna
- W Wahlatan Combu
- W. Wahlster, Saarbrücken

## IMPORTANT DATES

Submission deadline for complete papers

(in triplicate)	1 April 1987
Notification of acceptance or rejection	15 May 1987
Camera-ready copies of accepted papers due 1 July 1987	
Tutorials 2	2 September 1987
Meeting 2	4 September 1987

## **CONFERENCE FEES**

by 1 July 1987	AS 750
after 1 July 1987	AS 950

## **FUTHER INFORMATION**

E. Buchberger (+43 222) 663281-17 or J Retti (+43 222) 7293-5030 Österreichische Gesellschaft für Artificial Intelligence "ÖGAI-Tagung 1987" Postfach 177 A-1014 Wien, Austria, Europe

#### COMPUTER COMMUNICATION FOR DEVELOPING COUNTRIES '87

## 27-30 October 1987, New Delhi, India

CCDC87 is a special and unique international conference that will focus on the role of computer communication in the developing world. The first of its kind, it is sponsored by the International Council for Computer Communication (ICCC) and will be hosted by the Department of Electronics, Government of India at New Delhi.

The topics to be addressed would include the following:

- Computer Communications Technology and service trends
- Infrastructure for data communications Status and evolution in developing countries

- Office Information Systems Trends and relevance
- Message systems
- Teletext and Videotext
- ISDN evolution
- Satellite communication
- Fibre optics
- Network design and management
- Special networks and applications
- Characteristics of information society for the developing world
- Distributed processing
- Operational experiences
- Technology transfer
- Problems and challenges in introduction of new technologies
- Training and education
- Standards
- Socially relevant applications

Authors are requested to address one or more of the following issues of relevance to the developing countries:

- · Cost-effectiveness of the technology
- Adaptation of existing communication network
- R & D and local manufacture
- Standards
- Appropriate applications
- Socio-political issues

Those interested in conducting or participating in the following workshop sessions are also invited to send their detailed proposals:

- 1. Knowledge and resource sharing in computer communications among developing countries
- 2. Low cost systems in computer communications
- 3. Use of existing low quality communication network for computer communications
- 4. Overlay network options for computer communications
- 5. Status and future of ISDN
- 6. Communication Standards
- 7. Effective technology transfer and absorption

The Conference organisers hope to provide partial funding to a few contributors.

Intending contributors are invited to contact Dr. S. Ramani Chairman, Program Committee CCDC87 National Centre for Software Technology Gulmohar Cross Road No. 9 Juhu, Bombay 400 049, INDIA Phone: (+91 11) 629574, 629606 Telex: 011-78260 NCST IN

#### **PROGRAM COMMITTEE**

## S. Ramani, NCST (Chairman)

F. Kamoun, Centre National de L'Informatique, Tunisia

- George Okado, Kenya Computer Institute, Kenya
- Louis Pouzin, CNET/PAP, France
- V. Rajaraman, IISc, Bangalore, India
- Ronald P. Uhlig, Northern Telecom, Inc., USA

## **INSTRUCTIONS FOR AUTHORS**

A limited number of conference papers will be accepted for presentation at CCDC87. These papers must be unpublished and based on original research, developments, or studies carried out recently. They should concentrate on the technical areas listed.

Papers on detailed theory and specific products are outside the scope of the Conference and will be rejected, as well as those that are overly commercial or that deal with military matters.

Authors should ensure that the author name(s) and complete business address, telephone, and Telex number of the principal author, as well as relevant key words, appear at the top of the paper.

Papers should be in the range of 3000 to 8000 words and be comprehensible to a wide variety of professionals.

## DEADLINES

## **Receipt of Papers**

4 copies to be received by the Committee on or before **15 March 1987.** for review.

## **Comments from Committee**

To be received by the author(s) on or before 15 May 1987.

## **Camera Ready Copy**

To be prepared by author(s) on special paper sent by the Committe; to be received by the Committee on or before 1 August 1987.

## SECOND CONFERENCE ON APPLIED NATURAL LANGUAGE PROCESSING

## 9-12 February 1988, Austin, Texas, USA

This meeting will focus on the application of natural language processing techniques to real world problems. It will include invited and contributed papers, panel discussions, tutorials, exhibits, and demonstrations. Original papers are being solicited in areas such as human-machine interfaces (including data bases, expert systems, report writers, etc.), speech input and output, information retrieval, text generation, machine translation, office automation, writing aids, computer-aided instruction, tools for natural-language processing, and applications to medical, legal, or other professional areas. Papers may discuss applications, evaluations, limitations, and general tools and techniques. Papers that critically evaluate a formalism or processing strategy are especially welcome.

Papers or panel proposals discussing end-user experience with NL systems are also invited.

Authors should submit, by 1 September 1987, ten copies of a 6-8 page summary (single-spaced, pica or elite size type, exclusive of references) to

Bruce Ballard 3C-440A AT&T Bell Laboratories Murray Hill, N.J. 07974

#### (201)582-5440

allegra!bwb@ucbvax.berkeley.edu

This summary should describe completed rather than intended work, identify distinctive aspects of the work, and clearly indicate the extent to which an implementation has been completed; vague or unsubstantiated claims will be given little weight. The title page should include the title, the name(s) of the author(s), complete addresses, and a short (5-6 line) abstract.

Authors will be **notified of acceptance** by **5 October 1987.** Full-length versions of accepted **papers** prepared on model paper must be received, along with a signed copyright release statement, by **30 November 1987.** 

All papers will be reviewed by members of the program committee, which is composed of

Bruce Ballard, chair, AT&T Bell Laboratories Madeleine Bates, BBN Laboratories Tim Finin, University of Pennsylvania Ralph Grishman, New York University Carole Hafner, Northeastern University George Heidorn, IBM Paul Martin, SRI International Graeme Ritchie, University of Edinburgh Harry Tennant, Texas Instruments

The meeting will include one day of tutorials by noted contributors to the field. Facilities for exhibits and system demonstrations will also be available. Persons wishing to arrange an exhibit or present a demonstration should send a brief description together with a specification of physical requirements (space, power, telephone connections, tables, etc.) to

Kent Wittenburg

or Carl Weir

MCC 3500 W. Balcones Center Drive Austin, TX 78759 (+1 512) 338-3626 or 338-3616

Local arrangements are being handled by Jonathan Slocum & Barbara Smith

MCC

3500 W. Balcones Center Drive

Austin, Texas 78759

(+1 512) 338-3571 or 338-3527

slocum@mcc.arpa or barbara@mcc.arpa

For additional information on the conference, contact Don Walker – ACL Bell Communications Research

445 South Street

Morristown, NJ 07960

(+1 201) 829-4312

walker@flash.bellcore.com

or ucbvax!bellcore!walker

In addition to persons named above, the Conference Committee includes Norman Sondheimer, USC/ Information Sciences Institute, General Chair; Martha Palmer, UNISYS, Tutorials; and Jeffrey Hill and Brenda Nashawaty, Artificial Intelligence Corporation, Publicity.

#### COLING-88

12TH INTERNATIONAL CONFERENCE ON COMPUTATIONAL LINGUISTICS

#### 22-27 August 1988, Budapest, Hungary

Papers are invited on all aspects of computational linguistics in a broad sense, including but not limited to:

- theoretical issues of CL in its relations to linguistics, mathematics, computer science and cognitive science
- computational models of (sub)systems of natural language and of human communication (phonemics, morphemic, syntax, semantics, pragmatics, parsing and generation, discourse, speech acts and planning)
- linguistic contributions to
  - natural language dialog systems, intelligent and cooperative question answering
  - machine (aided) translation
  - speech understanding and voice output procedures
  - systems for text generation
  - systems for use and preparation of dictionaries for humans and machines
  - intelligent text editors
- knowledge representation and inferencing
  - language comprehension
  - automatic creation of knowledge bases from texts
- hardware and software support for language data processing
- computational tools for language learning and teaching

Papers should report on substantial, original and unpublished research and should indicate clearly the position of the work described within the context of the research in the given domain and emphasize what new results have been achieved.

Authors should submit four (4) copies of an extended abstract not exceeding seven (7) double-spaced pages plus a title page including the name(s) of the author(s), complete address, a short '(five-line) summary, and a specification of the topic area.

Abstracts must be received not later than 10 December 1987 by the Chairperson of the Program Committee:

Dr. Eva Hajicova (COLING-88)

Charles University

Faculty of Mathematics, Linguistics Malostranske n. 25

CS-118 00 Praha 1, Czechoslovakia

Authors will be notified of acceptance by 28 February 1988. Camera-ready copies of final papers must be received by 30 April 1988.

Inquiries about the conference, exhibitions, and demonstrations (live and video) should be directed to:

**COLING-88** Secretariat

c/o MTESZ Congress Bureau Kossuth ter 6-8 H-1055 Budapest, Hungary telex 225792 MTESZ H COLING-88 is sponsored by the International Committee on Computational Linguistics. It is organized by the John von Neumann Society for Computing Sciences in cooperation with the Computer and Automation Institute and the Institute for Linguistics, both of the Hungarian Academy of Sciences.

COLING-88 will be immediately followed by the 3rd EURALEX Congress on all aspects of lexicography, also to be held in Budapest.

#### ANNOUNCEMENTS

#### EUROPEAN ACL ELECTION RESULTS

The current slate of officers for the European chapter of the ACL is as follows: CHAIR (1987-88)

Margaret King, ISSCO

SECRETARY (1986-88)

Beat Buchmann, ISSCO

**TREASURER (1982-88)** 

Michael Rosner, ISSCO

- ADVISORY COMMITTEE (1987-88)
- Benny Brooda, University of Stockholm

Maurice Gross, University of Paris

Christian Rohrer, University of Stuttgart

NOMINATING COMMITTEE (1987-88) Giacomo Ferrari, University of Pisa

Gerald Gazdar, University of Sussex

NOMINATING COMMITTEE (1987-90) Eva Hajičova, Charles University Gerard Kempen, University of Nijmegen

> ACL EUROPEAN CHAPTER THIRD CONFERENCE AND GENERAL MEETING PROVISIONAL PROGRAM

## 1-3 April 1987, University of Copenhagen, Denmark

#### WEDNESDAY, 1 APRIL

- 9.30 Opening
- 10.00 Invited paper: Laurence Danlos, Paris Coffee
- 11.15 Invited paper: Martin Kay, Palo Alto Lunch (can be bought in the University cafeteria)

In the afternoon, there will be 2 parallel sessions A and B:

## Session 1: 13.30-15.30

- A: Ritchie, Black, Pulman, Russell: Formalisms for Morphographemic Description
  - Lau, Perschke: Morphology in the Eurotra Base Level Concept
  - Ralli, Galiotou: A Morphological Processor for Modern Greek
- B: Atwell: How to detect Grammatical Errors in a Text without Parsing It
  - Menzel: Automated Reasoning about Natural Language Correctness

Computational Linguistics, Volume 13, Numbers 1-2, January-June 1987