

AAAI News

New Membership Directory

At this summer's conference in Boston, Jon Doyle, chair of the Association of Computing Machinery (ACM)'s SIGART, approached Danny Bobrow and myself about creating a joint membership directory. Viewing this joint directory as a great idea, we approached Peter Patel-Schneider, Secretary of Canadian Studies in Computational Linguistics and Intelligence (CSCLI), about including CSCLI members. Peter tentatively agreed, contingent on his board's agreeing to the joint effort. It is hoped that we can also include the budding Mexican AI society's members in the directory.

The purpose of the directory is not only to provide a listing of the names of all these societies' members but also to serve as a general information resource about North American AI research centers, AI companies, and universities and colleges with AI studies. If your company, university or college, or research center was not represented in last year's AAAI directory, please send address, telephone, and contact information to me at AAAI, and I'll make sure it is included.

Since the summer meeting, we have begun discussions on the content, format, and production schedule for the directory. We are hoping to develop this directory for release in mid-July 1991, with AAAI managing the production.

Since you will not receive your regular directory in February, we changed the date by which you need to submit address changes. It is now **1 March 1991**.

I hope you will find the new directory a worthwhile service. Your comments on this project or any other issue are welcomed.

—Claudia Mazzetti
Executive Director
csnet: mazzetti@aaai.org

Planning in Uncertain, Unpredictable, or Changing Environments

The following Spring Symposium summary was inadvertently left out of the Fall AI Magazine. We include it here, with apologies to the author.—Ed.

This symposium focused on the practical and theoretical issues involved for AI planning systems in domains in which it is difficult to maintain a consistent world model due to uncertainty, unpredictability, or rapid environmental change. Much of the early research in planning assumed that the planner possessed complete knowledge of the current state of the world and the cause-and-effect relationships that governed change in that world. This assumption gave rise to a model of planning in which a sequence of atomic actions was generated by a planning component and subsequently executed by a separate execution component. Clearly this approach was in need of revision in situations where separate execution cannot be guaranteed to succeed. A number of alternatives and refinements have now been suggested. Some examples include: interleaved or concurrent planning and execution, planners that schedule planning and control procedures, and planners that learn strategies for dealing with uncertainty and time-critical situations.

This symposium brought together researchers representing three main approaches to the area of dealing with dynamic domains. The first area involved research into models which could more appropriately deal with issues involving reasoning about execution time events and improving the planning paradigm to deal with the control of inferencing and actions under time (and other resource) limitations. A second area of interest was that of using machine learning to allow a system to improve its behavior by learning the characteristics of the domain in which it is executing. The final area

concerned the development of so-called "reactive planning systems," those in which execution time events could trigger rapid reactions in the system, and yet which, over time, would converge on goal directed behavior.

The symposium consisted of three talks, one on each of these major areas, followed by a set of panels and short presentations. The invited speakers included Nils Nilsson, Stanford University, speaking on "teleo-reactive systems," Peter Ramadge, Princeton University, speaking on non-linear, dynamic control systems, and Tom Mitchell, Carnegie Mellon University, speaking on the integration of explanation-based learning and planning. The working notes of this symposium are being released as a University of Maryland, Systems Research Center, Technical Report. Those interested in obtaining a copy should contact the program chair (hendler@cs.umd.edu).

—James Hendler

Fellows of the American Association for Artificial Intelligence

Artificial Intelligence is as old as computer science itself, and has changed during the last 40 years from the vision of a few pioneers to a professional field with many active research areas and widespread industrial applications. There has as yet been no way of publicly recognizing outstanding achievement in the field.

Recognizing this lack, the American Association for Artificial Intelligence, the largest AI society, has started a Fellows program, by which a limited number of AAAI members of appropriate standing and seniority will be selected each year to lifetime Fellow status. It is expected that there will be between two and three hundred Fellows once the program is mature, from the total of approximately thirteen thousand AAAI mem-

bers worldwide. The first group of 74 Fellows includes many of the founders of the field. Although these people have received various awards, this is the first time that their professional colleagues have formally recognised their achievement.

Fellows are recognized as having unusual distinction in the profession. A Fellow may be recognized by individual technical contributions, from having performed extended service to AAAI or the AI profession generally, or from total years in the profession. Evidence of technical contribution may be in the form of publications, but other evidence can also be considered, such as patent awards or statements of longstanding contribution to an industrial group efforts. The award of the status of AAAI Fellow carries no financial reward, and is taken to incur a certain responsibility to help maintain – perhaps even improve – the standards of the AI field.

The first Fellows dinner was held on Wednesday August 1, 1990, at the Eighth National Conference in Boston. There will be a Fellows dinner at each subsequent National Conference to formally welcome new Fellows.

Fellows will be selected from the nominations each year by a Fellows committee, usually chaired by the Past President of AAAI. The operation of this committee will be under the review of the AAAI Council, and we plan to take considerable care in making an open process while ensuring the confidentiality of its actual decision process. Since the members of the Fellows committee must be Fellows, the first group of Fellows was chosen by a special election from a list of nominations put forward by the membership. Details of this election process can be supplied by the AAAI office.

— Patrick Hayes

Chair, Fellows Committee 1989-90

1990 AAAI Fellows

James Allen, Rochester University
Saul Amarel, Rutgers University
Ruzena Bajcsy, University of Pennsylvania
Hans Berliner, Carnegie Mellon University
Wolfgang Bibel, Technische Hochschule Darmstadt
Woodrow Bledsoe, University of Texas at Austin
Daniel G. Bobrow, Xerox Palo Alto Research Center
Ronald J. Brachman, AT&T Bell Laboratories
J. Michael Brady, Oxford University
Rodney Brooks, Massachusetts Institute of

Technology

John Seely Brown, Xerox Palo Alto Research Center
Bruce Buchanan, University of Pittsburgh
Alan Bundy, University of Edinburgh
Eugene Charniak, Brown University
Alan Collins, Bolt Beranek & Newman
Randall Davis, Massachusetts Institute of Technology
Johan de Kleer, Xerox Palo Alto Research Center
Richard Duda, San Jose State University
Edward Feigenbaum, Stanford University
Jerome Feldman, International Computer Science Institute
Richard Fikes, Price Waterhouse Corporation
Michael Genesereth, Stanford University
Barbara Grosz, Harvard University
Peter Hart, Syntelligence Corporation
Patrick J. Hayes, Xerox Palo Alto Research Center
Geoffrey Hinton, University of Toronto
Bernhold K. P. Horn, Massachusetts Institute of Technology
Aravind Joshi, University of Pennsylvania
Robert Kahn, Corporation for National Research Initiatives
Takeo Kanade, Carnegie Mellon University
Casimir Kulikowski, Rutgers University
Douglas Lenat, Microelectronics and Computer Consortium
Victor Lesser, University of Massachusetts at Amherst
Hector Levesque, University of Toronto
Tomas Lozano-Perez, Massachusetts Institute of Technology
John McCarthy, Stanford University
Drew McDermott, Yale University
John McDermott, Digital Equipment Corporation
Alan Mackworth, University of British Columbia
Donald Michie, Turing Institute
Jack Minker, University of Maryland
Marvin Minsky, Massachusetts Institute of Technology
Tom Mitchell, Carnegie Mellon University
Allen Newell, Carnegie Mellon University
Nils Nilsson, Stanford University
Judea Pearl, University of California at Los Angeles
C. Raymond Perrault, SRI International
Tomaso Poggio, Massachusetts Institute of Technology
Robin Popplestone, University of Massachusetts at Amherst
J. Ross Quinlan, University of Sydney
Marc Raibert, Massachusetts Institute of Technology
D Raj Reddy, Carnegie Mellon University
Raymond Reiter, University of Toronto
Alan Robinson, Syracuse University
Charles Rosen

Azriel Rosenfeld, University of Maryland
Stanley Rosenschein, Teledyne Research Corporation
David Rumelhart, Stanford University
Arthur Samuels, posthumously
Erik Sandewall, University of Linköping
Roger Schank, Northwestern University
Edward H. Shortliffe, Stanford University
Herbert Simon, Carnegie Mellon University
James R. Slagle, University of Minnesota
Guy Steele, Thinking Machines Corporation
Mark Stefik, Xerox Palo Alto Research Center
Gerald Sussman, Massachusetts Institute of Technology
Jay M. Tenenbaum, Stanford University
Donald Walker, Bellcore
David Waltz, Thinking Machines Corporation
Bonnie Lynn Webber, University of Pennsylvania
Patrick H. Winston, Massachusetts Institute of Technology
Andrew Witkin, Carnegie Mellon University
William Woods, Harvard University

Executive Council Meeting Minutes

Date and Location: Monday, 30 July 1990, Hynes Convention Center, Room 300

Attendees: Daniel G. Bobrow, Bruce Buchanan, William Clancey, Richard Fikes, Ed Feigenbaum, Ken Forbus, Pat Hayes, Howard Shrobe, Raj Reddy, Bob Englemore, Nils Nilsson, Peter Patel-Schneider, Geoffrey Hinton, Bill Swartout, Mark Fox, Wendy Lehnert, Elaine Rich, Tom Dietterich, Reid Smith, and Claudia Mazzetti.

Daniel Bobrow, AAAI president, introduced the newly elected councilors—Tom Dietterich, Mark Fox, Barbara Hayes-Roth, and Richard Fikes. He then began the formal part of the meeting with the standing committee reports.

Standing Committee Reports

Bruce Buchanan, Treasurer and Chair of the Finance Committee, noted that this year the AAAI fund balance will increase by approximately \$400,000. He then introduced a resolution that allows the committee chairs to review all pertinent budgets, with the subsequent chairs incurring any surplus or deficit from the previous chairs' committee budgets. This policy was amended so that any projected surplus or deficit would be approved with the advice and consent

of the finance committee. It was also introduced that one-half the membership dues be allocated to cover the magazine costs. The recommendation was tabled until an analysis of the financial implications could be made.

The Publication Chair, William J. Clancey, reported on the status of AAAI Press. Currently, there are three new books for release in spring 1991. The council then discussed changes to the magazine. These ideas were collected and will be submitted to the new editor-in-chief when this person has been selected. Clancey also noted that his job as chair would be ending in 1991.

Howard Shrobe, Conference Committee Chair, discussed the results of the Innovative Applications of Artificial Intelligence Conference. He then introduced Bill Swartout as the proposed Conference Committee Co-Chair; the council unanimously approved his election as conference co-chair. Shrobe then began an extensive discussion about the proposed new strategic plan for the national conference. Further discussions about the implementation of the plan were held during the conference committee meeting the following morning (31 July).

Peter Patel-Schneider, Spring Symposium Chair, reported on his plans for the 1991 symposium. He wants to reduce the number of attendees at each symposium but still try to keep the program self-supporting.

Kathy McKeown, Workshop Chair, noted that this year the number of workshop requests was much lower than in previous years. The Council voted to continue supporting the workshop grant program. Barbara Hayes-Roth, Scholarship Chair, was unable to attend the meeting, so Claudia Mazzetti gave her report. She noted that the number of travel grant applicants had greatly increased, so the Council unanimously voted to increase the grant allocation from \$25,000 to \$40,000, with the understanding that all student travel recipients will work as volunteers at the conference. The council also unanimously voted to continue funding the Women and Minority grants into 1991.

Pat Hayes, Interim Chair of the Fellows Committee, described the start-up procedures and discussed other issues.

Old Business

Computer Research Board (CRB): The Council unanimously agreed to

fund CRB for three years at \$25,000 each year (afterwards it was negotiated down to \$1 per member for a period of 5 years. Raj Reddy will negotiate AAAI representation with the CRB).

Computer Museum Grant: The Council unanimously agreed to fund the traveling exhibit about AI for \$10,000.

Corporation for National Research Initiative: No funding request was submitted for 1991 because spending was slower than expected.

Project Mercury: No further funds were approved at this time for project Mercury; the Council expressed support for maintaining the connection to Project Mercury, and helping to increase the set of machine readable files on AI subjects. The Project Mercury mail based bibliography retrieval service will remain available to AAAI members.

Software Archival Library: Ken Forbus said that he intends to use the Free Software Foundation's licensing agreement for our library. AAAI's attorney will review it in the fall. He also said that he expects to establish a board of individuals from different areas to identify key software to be included in the library.

Books for Third World Countries Project: Geoffrey Hinton introduced an alternative to the original proposal. The new proposal is to send a series of books to libraries in Eastern European countries. He volunteered to work with the AAAI office to organize such an effort.

New Business

Membership Survey: Claudia Mazzetti reviewed the content of the survey and noted that the sampled respondents wanted more industrial, practical involvement in AAAI programs and services. The AAAI Strategic Planning Committee will be reactivated to look into finding a balanced mix of fundamental and industrial research interests for AAAI's programs and services.

Chapters of the AAAI: Pat Hayes reported on requests from local groups to establish themselves as AAAI local chapters. After some discussion on this matter, the council decided to see in what ways AAAI could work with ACM's Sigart organization to

develop joint local chapters.

1991 Computer Bowl

Boston's Computer Museum, sponsor of the Computer Bowl, requests our assistance in soliciting requests for questions about AI. Questions can include but are not limited to games, history, people, and computers and pop culture. Examples might be: "Who was the Computer Science Department chair at Stanford in 1974? What is AAAI's phone number? Who was the first president of AAAI? What were the names of the astronauts in the movie *2001*?"

All submitted questions will be reviewed. The submitters of those questions chosen will have their names noted on the program and will receive a College Bowl T-shirt. Please send your questions to

Computer Bowl Questions
Computer Museum
300 Congress
Boston, MA

Solicitation for Videos About Research Efforts in AI Academic and Industrial Laboratories in the US and Abroad

As an experiment, the AAAI would like to communicate the different research activities within AI research laboratories in the US and abroad using the video media. This is an opportunity for your lab's research efforts to be conveyed to a larger audience.

We are looking for short, 10 minute tapes which we plan to run in parallel in one large room. Please do not send us videos of a particular research project or taped lectures. We're looking for broad descriptions of different programs and projects within a lab.

If you are interested in submitting such a tape, please send it by **March 1, 1991** to:

AAAI-90 Videos, 445 Burgess Drive, Menlo Park, CA 94025-3496 with the following basic information:

- Title
- Full names, postal addresses, phone numbers and email addresses of all authors
- Tape Format (e.g. VHS, 3/4" U-matic, NTSC, PAL, SECAM) and its duration in minutes
- One abstract briefly describing the lab's research programs, etc.; and
- Author or institution's permission to copy tape for reviewing purposes

All tapes will be previewed. Only

those tapes judged to be inappropriate will be returned.

1990 Financial Statement and Auditor's Report

The Board of Directors
American Association For Artificial
Intelligence
Menlo Park, California

INDEPENDENT AUDITOR'S REPORT

We have audited the balance sheet of American Association For Artificial Intelligence as of December 31, 1989, and the related statements of income, fund balance and changes in financial position for the year then ended. These financial statements are the responsibility of the Association's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of American Association For Artificial Intelligence as of December 31, 1989, and the results of operations and changes in financial position for the year then ended, in conformity with generally accepted



accounting principles.

ROBERT H. BURNHAM
Certified Public Accountant
530 Oak Grove Avenue, Suite 201
Menlo Park, California 94025

February 26, 1990

American Association for Artificial Intelligence

Balance Sheet

December 31, 1989

ASSETS

Current Assets:

Cash - Checking	\$ 46,290
Cash - Brokerage and money market savings	922,939.
Investments of \$5,471,731 less allowance for unrealized losses of \$120,017	5,351,714.
Accounts Receivable - Trade	45,242.
Inventory	<u>43,844.</u>
Prepaid Expenses & Advances	35,927.
Prepaid Expenses, Net - Future Events	58,609.
Total Current Assets	6,504,565.

Furniture, Fixtures & Equipment, Net (Note I-C)	118,161
Deposits	<u>10,580.</u>

\$ 6,633,306

LIABILITIES AND FUND BALANCE

Current Liabilities:

Accounts Payable and Accrued Expenses	\$ 4,037.
Due to IJCAI, Inc - 1989 Conference	357,413.
Unearned Membership Fees (Note 3)	284,154.
Total Current Liabilities	<u>645,604.</u>

Fund Balance	<u>5,987,702.</u>
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\$ 6,633,306.

The accompanying notes are an integral part of this statement.

American Association for Artificial Intelligence Statement of Income and Fund Balance for the Year Ended

December 31, 1989

Gross Profit (Loss), By Activity:

<i>AI Magazine</i> Revenue	\$187,729.	
<i>AI Magazine</i> Expenses	<u>(234,854.)</u>	\$(47,125.)
Memberships Revenue (Note 3)	470,651	
Memberships Expenses	<u>(147,036.)</u>	323,615.
AAAI Press Revenue	7,798.	
AAAI Press Cost of Sales	(21,441)	
AAAI Press Operating Expenses	<u>(32,467.)</u>	(46,110.)
Symposium '89 Revenue	28,292	
Symposium Expenses	<u>(30,227.)</u>	(1,935.)
IAAI Conference 1989	68,762	
Conference Expenses	<u>(133,991.)</u>	(65,229.)
NTU Tech U Revenue	52,374.	
NTU Expenses	<u>(21,206.)</u>	31,168
NCAI Proceedings Revenue	53,267.	
Proceedings Expenses	<u>(9,642.)</u>	43,625
IJCAI '89 Technical Program Revenue	714,624	
Technical Program Expenses	<u>(757,840.)</u>	(43,216.)
IJCAI '89 Tutorials Revenue	671,549.	
Tutorials Expenses	<u>(345,477.)</u>	326,072
IJCAI '89 Exhibits Revenue	515,600.	
Exhibits Expenses	<u>(129,861.)</u>	385,739

385,739

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**American Association for Artificial Intelligence
Statement of Income and Fund Balance for the Year Ended**

December 31, 1989
(continued from page 28)

IJCAI '89 Program Committee Expenses	(199,725.)
IJCAI, Inc. 's share of IJCAI '89 Net Income	(86,977.)
AI Journal Revenue, Net	(280.)
Interest Income	532,033
Royalty Income & Reprint Permissions	7,327
Net Unrealized Gains on Investment	45,348.
Grants & Scholarships Expended	(228,197.)
Prior Years Conferences, Tutorials & Symposiums Received (Paid) in 1989	<u>2,785.</u>
Other Publications	1,455.
Gross Profit, Combined	<u>980,373.</u>
Unallocated Operating Expenses	(531,820)
Net Income	<u>448,553.</u>
Fund Bal Balance - Beginning of Year	<u>5,539,149.</u>
Fund Balance - End of Year	<u>\$5,987,702</u>

The accompanying notes are an integral part of this statement.

**American Association for Artificial Intelligence
Statement of Changes in Financial Position**

December 31, 1989

Financial resources were Provided By:	
Net income	\$448,553.
Add: Expenses not using working capital:	
Depreciation	42,551
Working Capital provided from operations	491,104
Other uses:	
Decrease in Deposits	2,406.
Total Sources	493,510.
Financial Resource~ were Used For:	
Increase in furniture, fixtures ~ equipment	<u>(17,115.)</u>
Increase in Working Capital	476,395.

Analysis of Changes in Working Capital:

Increase (Decrease) in Current Assets:	
Cash ~ investments	772,438.
Account receivable	(30,948)
Prepaid expenses & Advances	(45,308)
Inventory	11,599.

(Increase) Decrease in Current Liabilities:

Accounts payable & accrued expenses	32,453
Due to IJCAI, Inc.	(207,413.)
Unearned advertising	<u>48,400.</u>
Unearned membership fees	<u>(104,826.)</u>
Increase in Working Capital	476,395.

The accompanying notes are an integral part of this statement

**American Association for
Artificial Intelligence
Notes to Financial Statements
December 31, 1989**

Note 1: Summary of Significant Accounting Policies

A Method of Accounting:

The Financial Statements are presented on the accrual basis of accounting

B Inventory:

Magazine, tutorial, and proceedings inventory is valued at the lower of cost; or market value as of December 31, 1889.

C Furniture, Fixtures and Equipment:

Furniture, fixtures and equipment are stated at cost, less accumulated depreciation. Depreciation is computed on the straight-line method over estimated useful lives of five to ten years Furniture, fixtures and equipment consist of the following at December 31, 1989:

Cost	\$ 230,924.
Accumulated Depreciation	(112,763.)
Net	\$118,161

D. Income Taxes:

American Association For Artificial Intelligence is exempt from income taxes on its earnings from investments and its exempt function operations under Section 501 (c) (3) of the Internal Revenue Code and Section 23701 (d) of the California Revenue and Taxation Code. Federal and California taxes totaling \$23,660 were paid during 1989 on earnings from sales of mailing lists and advertising.

Note 2: Operations

The American Association For Artificial Intelligence (AAAI) was formed in 1979 as a scientific society, to encourage the basic knowledge of what constitutes intelligent thought and behavior and how it can be exhibited in computers. This is accomplished by the *AI Magazine*, *AI Journal*, and other AI related publications, AAAI sponsored National Conference (NCAI), Conference on Innovative Applications for Artificial Intelligence (IAAI), NTU University Tutorials, Symposium Series, and the AAAI Workshop Program In addition, AAAI grants monies to outside institutions and individuals.

Note 3: Memberships

Annual membership in the American Association For Artificial Intelligence is \$40 for individuals, \$20 for student members, and \$60 for academic/corporate library subscriptions \$25 is added to the above for foreign members. Three and five year memberships are also available All revenue from memberships is included in the AI Memberships gross profit center. Revenues from membership fees are earned ratably over the respective mem-